

## Entrepreneurship Education in South Africa

Tendai Chimucheka

Department of Business Management, University of Fort Hare, Alice,  
P.B. X1314, Eastern Cape, 5700, South Africa.  
E-mail: tchimucheka@ufh.ac.za, tenchims@gmail.com

Doi:10.5901/mjss.2014.v5n2p403

### Abstract

*This paper discusses entrepreneurship education in South Africa. The objectives of the paper are to give an overview of entrepreneurship education in South Africa, to identify and discuss the objectives of entrepreneurship education. The target audience for entrepreneurship education, benefits of entrepreneurship education, challenging confronting entrepreneurship education, the assessment of entrepreneurship education and the support for entrepreneurship education in South Africa were also discussed in this paper. This paper also discusses the relationship between entrepreneurship education and the performance of SMMEs in South Africa. Since this is a literature study, various research papers in line with entrepreneurship education were reviewed.*

**Keywords:** entrepreneurship education, benefits, SMME, support, South Africa, performance

### 1. Introduction

*The key to success in establishing a culture of entrepreneurship in South Africa is education" (Gouws, 2002:41)*

South Africa has a very high unemployment rate, low economic growth and a dismal Total Entrepreneurial Activity (TEA) (Swanepoel, Strydom & Nieuwenhuizen, 2010:58; Von Broembsen, Wood & Herrington, 2005:36). These are real challenges and threats to the national economy; hence both the government and private businesses are attempting to address these challenges.

Some researchers in the economic spectrum agree that the development of the abilities and skills of SMME owners and managers is key to increased competitiveness and also sustainable growth of SMMEs as well as the growth of the national economy (Lange, Ottens & Taylor, 2000:5; Rogerson, 2001:117; Tustin, 2003:43; Volkman, 2004:1; Lowe & Mariot, 2006:105). This therefore means developing the SMME sector through empowering owners and managers with appropriate skills which then should be able to improve the TEA of South Africa.

The difference between SMMEs that grow and those that find it difficult to grow is the ability of SMME operators to learn and acquire skills (Robertson, 2003:461; Henry, Hill & Leitch, 2005:100). This issue shows that improving entrepreneurship education may be able to improve the economy of the nation and ultimately help solve its socio-economic challenges, especially unemployment and low economic growth.

Karimi, Chizari, Biemans and Mulder (2010:35) are of the view that it is because entrepreneurship has long been considered as a significant factor in socio-economic growth and development, and thus has caused a tremendous increase in entrepreneurship education at various colleges and universities around the globe, and South Africa is no exception. It is clear that entrepreneurship education is assuming an extraordinary relevance within academic programmes all over the world, but there is very little known about it from a research prospective (Alberti, Sciascia & Poli, 2004:1).

Although entrepreneurship education ranks high on policy agendas in many countries, little research is available to assess its impact (Von Gravenitzet *al*, 2010:90). The effects emanating from entrepreneurship education are also still poorly understood, despite the wide promotion of entrepreneurship education (Von Gravenitzet *al*, 2010:91). There are still doubts about whether entrepreneurship education actually affect SMME performance or contribute significantly to SMME success (Devins, Johnson & Sutherland, 2004:449).

Other researchers argue that there is a limit to what can be taught and learnt (Kunene, 2008:119) while some are of the view that personal experience may be the best teacher of entrepreneurship (Freeman, 2000:372; Massey, 2004:458). All this highlights the debate about the usefulness of the impact of entrepreneurship education on the

performance of SMMEs in the world.

Entrepreneurship education has been rapidly promoted in educational institutions (Gurol & Astan, 2006:27) and this came as a response to the plea for the advancement of entrepreneurship education in the formal school curriculum that came from various sources, including the formal education sector, the private sector and Non Governmental Organisations (North, 2002:24). Entrepreneurship education is said to be very important in the nurturing of the entrepreneur (Hisrich, Peters & Dean, 2008:58).

## 2. Entrepreneurship Education

Albertief *et al.*, (2004:5) stated that entrepreneurship education was pioneered by Shigeru Fijii, who started teaching in this field in 1938 at Kobe University in Japan. In 1947, Myles Mace had introduced the first course in entrepreneurship in the United States of America at the Harvard Business School (Katz, 2003). Resultantly, in less than half a century, entrepreneurship education had already gained a more universal recognition (Alberti *et al.*, 2004:5).

Despite the fact that entrepreneurship education is not a totally new discipline, there is still considerable uncertainty and debate as to whether entrepreneurs are born or made (Henry *et al.*, 2005:98; Botha, 2006:48; Morh *et al.*, 2009). Most of the empirical studies conducted, indicate that entrepreneurship can be taught and education can actually beneficially foster entrepreneurship (Kunene, 2008:118). Other researchers uphold the notion that entrepreneurship can be cultivated in individuals (Rwegima, 2004:48; Global Entrepreneurship Monitor, 2004:190) and that entrepreneurs can be created and enhanced by acquiring and developing certain behaviours (Klofstein & Spaeth, 2004:5). Rae (2000:145) asks how people learn to work in entrepreneurial ways. Stokes, Wilson and Mador (2010:30) argue that human beings have entrepreneurial behaviours, attributes and skills that can be developed through learning, and in this instance, is entrepreneurship education.

Among other authors, the trainability of entrepreneurs is also accepted and supported by McClelland, (1961:1); Hisrich and Peters, (2002:19) and; Pretorius and Van Vuuren, (2003:515). Some writers in the field of entrepreneurship have been successful to prove that entrepreneurship can actually be learnt, just like any discipline. In 1985, Peter Drucker, who is recognised as one of the leading management thinkers, stated that entrepreneurship is not magic, it is not mysterious and it has nothing to do with one's genes. According to Drucker (1985), Freeman (2000:372), Massey, (2004:458) and Timmons and Spenelli, (2007), entrepreneurship can actually be taught and learnt. This justifies the need for entrepreneurship education as a solution to the low total entrepreneurial activity, unemployment and low economic growth in South Africa.

According to Rwegima and Venter, (2004:66) and Wickham, (1998:15) mentioned that entrepreneurship education can affect an entrepreneurs' development. Wickham, (1998:15) argued that genes alone do not determine who becomes a successful entrepreneur. He argued that learning to be entrepreneurial is like learning to do anything else. It is just a form of behaviour, and behaviour is learnt (Wickham, 1998:xi).

The Consortium of Entrepreneurship Education, (2004:1) mentioned that it is through effective entrepreneurship education that people can access the skills and knowledge needed to start and grow an entrepreneurial venture. Stokes *et al.*, (2010:164) state that entrepreneurship education encompasses a wide range of and many different styles of learning.

Entrepreneurship education seeks to prepare people to be responsible, enterprising individuals who are able to take risks, manage results and learn from outcomes (Bbenkele & Ndedi, 2010:5). It also helps SMME owners and managers to learn how to prevent and solve business problems (Robertson *et al.*, 2003:314; Ladzani & Van Vuuren, 2002:156; Hisrich *et al.*, 2008:58). Entrepreneurship education can also help enhance leadership and boost the need for achievement, enhance self confidence and influence growth-related entrepreneurial and managerial attitudes and perceptions as well as alleviate the fear of failure in business (Ibrahim, Soufani, Poutziouris & Lam, 2004:478).

Since this study seeks to investigate the impact of entrepreneurship education on the performance of SMMEs in the Buffalo City Municipality in South Africa, it is important to assess the state of entrepreneurship education in South Africa.

### 2.1 Entrepreneurship education in South Africa

The current state of the South African economy is a cause of concern for citizens who are confronted with real challenges like crime, mismanagement, corruption and unemployment (North, 2002:24). Von Broembsen *et al.*, (2005:36) clearly shows that there is a low total entrepreneurial activity among South African citizens as compared to other

countries. Von Broembsen *et al.*, (2005:36) reports that most South African youths do not believe that they have the skills to start a business and this may be attributed to the low proportion of South Africans that have completed secondary education. In 2001 and 2002 the education and training system was regarded as the number one limiting factor for entrepreneurship in South Africa (Herrington & Wood, 2003:1). Fatoki and Garwe, 2010:731 also confirm that entrepreneurship education is still one of the prime factors limiting the growth of the economy of South Africa. This therefore means that an improvement in entrepreneurship education may improve the low rate of entrepreneurial activity of SMMEs in South Africa, which is regarded as the economic engine of the African continent.

Davies (2001:31) noted that South Africa's capacity to absorb a new labour force into the formal sector has fallen from about 62% to less than 4% in the past four decades. Co and Mitchell (2006:348) are of the view that active intervention in the form of entrepreneurship education is necessary if people, especially the youth are to escape the challenges that will come with unemployment.

Co and Mitchell (2006:348) stated that it is widely accepted and it is no longer surprising that the only way South Africa can address unemployment and revitalise the economy is through the rediscovery of the entrepreneur who is able to take calculated risks, one who breaks new ground and also is innovative. The South African economy needs entrepreneurs to address the problem of unemployment (Co & Mitchell, 2005:2). This therefore means that people need to be educated and trained so as to be equipped with entrepreneurial skills and values. Educating people in the field of entrepreneurship will encourage them to create jobs rather than just becoming job seekers.

Considering the challenges faced by the nation today, it is very unfortunate that the existing entrepreneurial base in South Africa is neither solid nor strong (Davies, 2001:32). This is mainly because the majority of South Africans have grown up with little or without home experience of entrepreneurship and they do not view themselves as potential entrepreneurs. According to Herrington and Wood (2003:2), there is a need to raise entrepreneurial awareness and create a good grounding in entrepreneurial skills including basic business, administration and financial skills in South Africa. Herrington and Wood (2003:10) stressed the importance of developing an entrepreneurial mindset which includes the perception by individuals that they have the ability to succeed as entrepreneurs and that entrepreneurship can be a desirable career path.

Lack of entrepreneurship education has been identified by South African experts as one of the prime factors in South Africa (Herrington and Wood, 2003:11; Fatoki and Garwe, 2010:731). Umsobomvu (2002:2) recommended that entrepreneurship education be integrated into the school curriculum at all levels so as to build a strong entrepreneurial culture.

It has to be noted that entrepreneurship is still a young developing field (Alberti *et al.*, 2004:4) with growing importance in the global business environment and it is for this reason that there has been an increased demand for entrepreneurship education. Entrepreneurship education is still at its early developmental stages (Mitchell, 2006:349) even though some institutions of higher learning in South Africa have been involved since the early 1990s (Co & Mitchell, 2006:357).

North (2002:24) notes that there is an urgent need for young people to be educated and trained in the field of entrepreneurship. This shows the importance of entrepreneurship education. He argued that entrepreneurship education can contribute to the ideal of empowering as many people as possible so as to unleash the previously stifled human potential of South Africans. Entrepreneurship education is an important factor that can contribute to the development of an entrepreneurial culture in developing countries (Burger *et al.*, 2005:90).

Programmes which aim to develop entrepreneurship are numerous in South Africa but tangible results are difficult to see. This may be because of insufficient growth within existing firms to reduce unemployment (Bbenkele & Ndedi, 2010:1) thus also motivating the need for this study.

Due to the history of discouragement of entrepreneurship and the culture of working for others, there is still an absence of entrepreneurial education for young people in a way that could encourage them to enter business and acquire a culture of entrepreneurship (Agupusi, 2007:15). Bbenkele and Ndedi (2010:5) noted that entrepreneurship education is a common course of study in higher education settings. They also mentioned that to successfully address the challenge of youth unemployment, certain things need to be developed regarding the training of potential entrepreneurs through tertiary institutions. Karimi *et al.*, (2010:37) agree that entrepreneurship education can play a crucial and significant role in changing views of South Africans towards self-employment and gaining necessary skills to manage a business. In Ndedi and Bbenkele's (2010:5) view, it is the behaviour to engage in the start-up process that really matters and that is what is lacking in most entrepreneurship programmes in South Africa.

South Africa's future entrepreneurial capacity depends on how well the nation is equipping individual citizens to start their own businesses and to individuals to be able to provide employment, not only for themselves, but also for

others (GEM, 2005:36). It is beyond reasonable doubt that education is key and entrepreneurship education may play a critical role in developing the culture of entrepreneurship in South Africa and the rest of the continent.

To realise the ideal of a better life for all South Africans, the entrepreneurial energies and capabilities of all citizens should be harnessed and improved to ensure that the country's full potential for economic growth is unleashed (North, 2002:24). Improving and promoting entrepreneurship education in South Africa at all levels of education and to all people will help the nation realise the goal of economic growth, employment creation and also improve its Total Entrepreneurial Activity (TEA).

## 2.2 Entrepreneurship Education defined

Education is defined as the theory and practice of teaching or information about training in a particular subject (Oxford Dictionary, 2005). Foxcroft *et al.*, (2002:18), defined entrepreneurship education as the extent to which the education system is effective in providing instruction and experience in the creation and management of SMMEs.

Entrepreneurship education can also be defined as a life-long learning process which proceeds through at least five distinct stages of development (Consortium for Entrepreneurship Education, 2004:6). The stages include the basics, competence awareness, creative applications, start up and finally, growth.

Jones and English (2004) in Mauchi, Karambakuwa, Gopo, Kosmas, Mangwende and Gombarume (2011:1307) define entrepreneurship education as the process of providing individuals with the ability to recognise commercial opportunities and the knowledge, attitudes and skills to act on them. Entrepreneurship education can be defined as the transfer and facilitation of knowledge about how, by whom, and with what effects opportunities to create future commodities are discovered, evaluated and finally exploited.

Ladzani and Van Vuuren (2002:155) defined entrepreneurship education as a three-legged pot of motivational, entrepreneurial and business skills training. Stokes *et al.*, (2010:1) stated that human beings have behaviours, attributes and skills which can be developed through learning, which is also the case with entrepreneurship education. The definition of entrepreneurship education adapted at European level stresses that this concept is much wider than just 'training on how to start a business' (Raposo & Do Paco, 2010:1).

According to Isaacs *et al.*, (2007:614), entrepreneurship education is defined as the purposeful intervention by an instructor in the life of the learner to impart entrepreneurial qualities and skills to enable the learner to survive in the business world. Alberti, Sciascia and Poli (2004:5) defined entrepreneurship education as the structured and formal transmission of entrepreneurial competencies, which in other words, refers to the skills, concepts and mental awareness used by individuals during the process of starting and developing their growth oriented ventures.

Although the definitions seem different, they all include the development and improvement of entrepreneurial awareness, knowledge, skills and concepts in the field of entrepreneurship. Entrepreneurship education is developing and improving the competencies that are needed to successfully establish and run an entrepreneurial venture.

## 2.3 Objectives of Entrepreneurship Education

Karimi *et al.*, (2010:37) are of the view that entrepreneurship education tries to prepare people to be responsible, to take risks, to manage the business and to learn from the outcomes by immersing themselves in real life learning experiences. The main objective of entrepreneurship education is to foster the creation of new entrepreneurs who could start new ventures (Tobias & Ingrams, 2010:2).

Entrepreneurship education seeks to prepare people to be responsible, enterprising individuals, who become entrepreneurial thinkers and contribute to sustainable economic development (The Consortium for Entrepreneurship Education: 2004:3). It is also the objective of entrepreneurship education to encourage creative thinking and to promote a strong sense of self-worth and accountability.

Entrepreneurship knowledge and skills are essential resources for the success of the SMMEs and ultimately for economic development (Stokes, Wilson & Mador, 2010:77). Entrepreneurship education has been driven especially by academics, business leaders, entrepreneurs as well as government officials seeking an advantage in a globalised world (Frederick, 2007:2).

Alberti *et al.*, (2004:5) outlined three main sources that demand entrepreneurship education. The sources are the government, students and the business world. Burger *et al.*, (2005:90) highlighted the expectations of entrepreneurship education. They agree with Jack and Anderson (1999:115) who pointed out that the government expect entrepreneurship education to contribute to job creation, economic growth, skills enhancement and the development of entrepreneurial

culture which will ultimately eradicate poverty. Businesses on the other hand, expect entrepreneurship education to develop a general understanding of basic business issues, creative work attitudes and an entrepreneurial approach among learners (Jack & Anderson, 1999:112). Learners are said to expect entrepreneurship education to assist them in their quest to start new ventures and to develop skills that will allow them to be employable in bigger firms also (Jack & Anderson, 1999:116). Practicing entrepreneurs expect entrepreneurship education to help them solve the unique problems in their businesses (Young, 1997:218; Burger *et al.*, 2005:90). Practicing entrepreneurs seek to grow their businesses, maximise their profitability and also to dominate the market.

Solomon (2007:171) identified focus areas that should be covered in entrepreneurship education. He states that entrepreneurship education needs to include skill building in negotiation, leadership, new product development, exposure to technological innovation and creative thinking. Other areas that can be identified as crucial for entrepreneurship education include awareness of entrepreneurial career options, sources of capital, characteristics that define entrepreneurial personality, idea protection and challenges that can be faced at each stage of business development (Kabongo & Okpara, 2010:297).

Nieman & Nieuwenhuizen (2009:14) are of the opinion that the core objective of entrepreneurship education is to generate a greater variety of ideas, to show how to exploit a business opportunity and to cover the existence sequence of actions for entering a business or creating a new venture.

Individuals and organisations seek entrepreneurship education for varying reasons. Alberti *et al.*, (2005:8-9) state that the most cited objectives of entrepreneurship education are to acquire knowledge relevant to entrepreneurship; acquire skills in the use of techniques, in the analysis of business situations and in the synthesis of action plans. This objective aims at the promotion of skills of analysis and synthesis in the use of knowledge about accounting, marketing, finance and general management in a holistic way; identify and stimulate entrepreneurial drive, talent and skill; develop empathy and support for the unique aspect of entrepreneurship; undo the risk adverse bias many analytical techniques and to revise attitudes towards change; and to encourage new start-ups and other entrepreneurial ventures and to stimulate the 'effective socialisation element' in oneself.

Alberti *et al.*, (2004:9) stress that entrepreneurship education aims at building the so-called entrepreneurial competencies, which are considered as combinations of different entrepreneurial skills, knowledge and attitudes.

Arogundade (2011:27) reported that entrepreneurship education is structured to enable individuals to be self-employed and self-reliant; enable people to be creative and innovative in identifying business opportunities; serve as a catalyst for development and economic growth; reduce the level of poverty; create employment opportunities; reduce rural-urban migration; empower tertiary institution graduates with adequate training in risk management; and to inculcate the spirit of persistence in people which will enable them to persist in any business venture.

It is the understanding of the objectives of entrepreneurship education programmes that introduces a deeper understanding of the different audiences for entrepreneurship education.

#### 2.4 Target audience of entrepreneurship education

Traditionally, entrepreneurship education was addressed to small business owners and managers, and those who wanted to start their businesses, but nowadays it is taught to a very diverse audience, varying from those with little formal education to those who hold PhDs and also to people in different countries in the world (Brockhaus, 2001; Alberti *et al.*, 2004:10).

Block and Stumpf (1992:19) suggest that if the definition of entrepreneurship used, is the pursuit of opportunities without regard to the currently available resources, the audience of entrepreneurship education will as well broaden considerably beyond potential new business starters. This will allow many categories of people to be included as potential audiences of entrepreneurship education. The audience of entrepreneurship education can include the self-employed, small business starters, managers of organisations, scholars, SMME advisors and consultants.

Segmenting the audience of entrepreneurship education is important for different categories of people who usually have different learning needs (Ghosh & Bloch, 1994). Referring to the audiences identified by Block and Stumpf (1992:19), entrepreneurs, managers, people with entrepreneurial spirit and scholars will be considered as possible categories of entrepreneurship education, which are:

- Entrepreneurs - Active entrepreneurs who perceive a need for entrepreneurial and management training is generally the most common target for entrepreneurship education.
- Managers - Both line and senior managers may want to foster an entrepreneurial spirit, focused on identification and exploitation of opportunities in the people that they manage. This may be the need for

entrepreneurship education to managers.

- People with entrepreneurial spirit - People who want to kindle the entrepreneurial spirit within themselves need and may seek entrepreneurship education. Individuals with an entrepreneurial spirit show an attitude towards experiencing new situations, enhancing change and being open and flexible about new views and ideas. Learning objectives and needs of these people may include the development of empathy and support for entrepreneurship, and also identification and stimulation of entrepreneurial talent and skills.
- Scholars - Scholars are individuals who wish to explore entrepreneurship at an intellectual level. Their purpose is not really to become entrepreneurs, but to acquire knowledge about the peculiarities of entrepreneurship, without having a mind to direct application to their career. Scholars also include students and academics interested in entrepreneurship education as a discipline.

### 3. Benefits of Entrepreneurship Education

It has been argued that acquiring and developing entrepreneurial competencies is more important than the direct provision of financial resources and consulting support that may be needed by entrepreneurs ( Pretorious, 2001:223; Ladzani & van Vuuren, 2002:158; Nasser, Du Preez & Herrmann, 2003:399). Rae (2000:145); Dana (2001:405); Toye (2002:26); Nieman, Hough, & Nieuwenhuizen, (2003:12); Robertson (2003:470) suggest that entrepreneurial and management skills which are central for the running of successful SMMEs, can be developed through entrepreneurship education.

Considering the fact that there are different audiences that intend to benefit from entrepreneurship education, the benefits of entrepreneurship education will definitely be different to different individuals or organisations. Herrington and Wood (2003:10), Botha (2006:47) and Henry *et al.*, (2005:102) highlighted the benefits and advantages of entrepreneurship education which include that, it plays a critical role in raising awareness of the nature and importance of entrepreneurship to economic growth of a nation; contributed to the development and building of an entrepreneurship culture in any country; can help aspiring entrepreneurs by equipping them with practical skills and knowledge that is required in SMME start-up and management towards growth of their ventures; can also develop attitudes, perceptions and mindsets that are not averse to risk taking, failure and competition; can increase the intrinsic motivation and self confidence of both emerging and existing entrepreneurs; makes people realise that entrepreneurs can be made and not necessarily born; and that the possibility of business success can be enhanced if the problems anticipated are understood and solutions investigated prior to the business start-up through entrepreneurship education.

According to the Consortium for Entrepreneurship Education (2004:3) entrepreneurship education empowers individuals with knowledge and skills. The knowledge and skills that can be gained from entrepreneurship education include the ability to recognise opportunities, the ability to pursue opportunities by coming up with new ideas and marshalling the needed resources, the ability to create and manage a new venture and the ability to think in a creative and critical manner.

Charney, Libecap and Center (2000:1) are of the opinion that entrepreneurship education has become popular in many countries because it allows people to integrate finance, accounting, marketing economics, and other business disciplines. This is an enriching and integrative educational experience on the part of learners; can promote the formation of new businesses and enhance their employment prospects, and their success in the job market; and it may also promote technology transfer from the learning institutions to the market. Entrepreneurship education creates links between the business and academic communities.

On the other hand, Driver *et al.*, (2001:29) mention that there are arguments that the education field does not lead itself to possibility of start-up because the education system in South Africa does little to nature entrepreneurial activities). In South Africa this can be said to be as a result of challenges in entrepreneurship education.

### 4. Challenges Confronting Entrepreneurship Education

Although entrepreneurship education has been promoted in the world and in South Africa as a way of improving entrepreneurial activity and ultimately eradicate poverty, there are still barriers to effective entrepreneurship education in South Africa.

The challenges that confront South Africa as far as entrepreneurship education is concerned include overall lack of entrepreneurial elements in the education system (Foxcroft *et al.*, 2002:15); inappropriate learning methodologies (Botha, 2006:5); most education programmes are not being outcome or skill development based (Ladzani & Van Vuuren,

2002:155); and the fact that entrepreneurship is not being promoted as a career option since the education system promotes a large firm culture whereby the majority of students plan to work for someone else after graduation (Antonites, 2003:31).

## 5. Entrepreneurship Education and the Performance of SMMEs

Kangasharju (2000:30) states that in order to prevent business failures and promote SMME growth, the lack of appropriate skills must be addressed. This indicates that if certain skills lack, SMMEs will continue to fail and they will not grow. This calls for the promotion of entrepreneurship education to improve the skills of entrepreneurs. It is because of this expectation that more and better entrepreneurship education would result in more and better entrepreneurs that drives the proliferation of entrepreneurship education (Kabongo & Okpara, 2010:296).

Entrepreneurship education is said to be a key element in the successful venture creation (GEM, 2005:5). Relevant research suggests important links between education, venture creation and entrepreneurial performance (Raposo & Do Paco, 2010:1). Most of these researches show a positive relationship between education and performance of SMMEs. This is also supported by Maas and Herrington (2006:12) who stated that entrepreneurial performance is highly dependent on effective entrepreneurship education. It can no longer be rejected that education has a strong impact on entrepreneurship (Driver *et al.*, 2001:16).

Driver *et al.*, (2001:4) stated that lack of entrepreneurship education limit the performance of SMMEs in South Africa. According to Timmons and Spinelli (2007:64), successful entrepreneurs possess not only creative and innovative flair, but also strong general management skills, business know-how and sufficient contacts. Lack of these skills and knowledge in owners and managers of SMMEs will generally limit the performance and competitiveness of these ventures. Aderemi, Ilori, Siyanbola, Adegbite, Abereijo (2008:173) also found that SMME performance was related to business skills and motivation of the owner or manager.

Von Broembsen *et al.*, (2005) pointed out that individuals who believe that they have the skills to start a business are far more likely to start a business and succeed, than people who do not believe they have the skills. The same report (Von Broembsen, *et al.*, 2005:36) shows that most South Africans do not believe they have entrepreneurial skills, hence the low new firm creation and the high failure rate. Entrepreneurship education helps to improve confidence in SMME operators.

Other studies have shown evidence that entrepreneurship education can lead to a positive effect on success and growth of the majority of SMMEs (Simpson *et al.*, 2004:481; Keough, 2003:17; Ibrahim *et al.*, 2004:478; Mueller & Thomas, 2001:68). It has also been found that lack of entrepreneurship education leads to skills shortages and hinders entrepreneurship (Pretorius & Shaw, 2004:222; Ligthelm & Cant, 2002:6; Ladzani & Van Vuuren, 2002:156; Tustin, 2003:38)

Antonites (2003:31) mentions that many studies have proved that entrepreneurs can be taught to stimulate entrepreneurial activity and performance. This creation of entrepreneurs is partially dependent on the creation and advancement of efficient entrepreneurship education programmes (Pretorius *et al.*, 2005:100; Gurol & Atsan, 2006:26).

The study by Mutezo (2005:89) showed that entrepreneurs require business skills training and also entrepreneurial skills training. The performance of an entrepreneurial venture is critically influenced by the knowledge, skills and experience of the entrepreneur. Possession of adequate skills for entrepreneurial success is very crucial and some level of education is another success indicator for entrepreneurship (Ekpe, 2011:288). According to Kunene (2008:122), entrepreneurship education improves skills that enhance SMME development and entrepreneurial performance in terms of productivity, competitiveness, profitability and, increase in sales, assets and employees (Clover & Darroch, 2005:257; Henry, Hill & Leitch, 2005:102).

Successful entrepreneurs have particular skills, expertise and aptitudes that can be applied profitably in any enterprise. It is best to start and run an enterprise in something that one is more comfortable with or know of or at least in which one is skilled (Nieuwenhuizen, 2000:41). Entrepreneurship education is relevant and can determine whether a venture will succeed or fail.

It will be difficult to investigate the impact of entrepreneurship education without looking at the indicators or measures of entrepreneurship education. It is important to discuss how entrepreneurship education is assessed or measured. The following section discusses how entrepreneurship education can be assessed or measured.

## 6. The Assessment of Entrepreneurship Education

It is very important to measure or assess the impact of entrepreneurship education on the performance of SMMEs in South Africa, for this will show whether the objectives of entrepreneurship education are being achieved. In the past, little attention has been dedicated to how to measure the overall effectiveness of entrepreneurship education towards both individuals and the society (McMullan & Gillin, 2001).

According to Alberti *et al.*, (2004:16) the main challenges related to the assessment of entrepreneurship education lie in measuring output from the entrepreneurial education process. The methods for assessing the results of entrepreneurship education are still not well defined and there is no one standardised and generally accepted way of measuring the results (Alberti *et al.*, 2004:16)

Although it may seem difficult to determine the relationship between entrepreneurship education and the performance of SMMEs, some output measures of entrepreneurship education can be used to determine this relationship. Changes in entrepreneurial skills, changes in orientation towards entrepreneurial careers, changes in personal assessment of entrepreneurial skills and knowledge are some of the output measures for entrepreneurship education (Wickham, 1989; Alberti *et al.*, 2004:16).

The lack of generally accepted measures of entrepreneurship education may be as a result of a number of factors that characterise entrepreneurship education. Factors characterising entrepreneurship education include the different target groups, different objectives and also different levels of analysis (Alberti *et al.*, 2004:16).

## 7. Government Support to Entrepreneurship Education

In 1994, the new South African government's Reconstruction and Development Programme (RDP) placed a major emphasis on entrepreneurial awareness, education and training (Klofsten & Spaeth, 2004:8). The government and other Non-Governmental Organisations (NGOs) support SMMEs through entrepreneurship education and business advice (Clover & Darroch, 2005:257)

Ensuring access in entrepreneurship education programmes that upgrade the capacity of SMMEs, is cited as the main way in which the government can promote the establishment and growth of SMMEs and also reduce the high failure rate (Luiz, 2002:68). It is thus realised that the key to success in establishing a culture of entrepreneurship in South Africa is education (Gouws, 2002:41; Herrington & Wood, 2003:11).

Entrepreneurship education is considered important for economic prosperity (Sullivan, 2000:162; Kunene, 2008:119) hence the need for governments to focus on developing and improving access and the quality of entrepreneurship education. Many African governments' efforts to reduce unemployment have resulted in policy initiatives that are aimed at raising skills levels through entrepreneurship education (Massey, 2004:458; Sutherland, 2004:449). Subsequently, it is entrepreneurship education that is said to facilitate higher levels of performance in entrepreneurship (Foxcroft *et al.*, 2002:29).

## 8. Institutions that Support Entrepreneurship Education in South Africa

Ladzani and Van Vuuren (2002:156) mention that organisations wishing to develop entrepreneurship education are of the view that the main reason for venture failure is lack of entrepreneurship education. In the Buffalo City Metropolitan Municipality in the Eastern Cape Province of South Africa, there are various institutions that support SMMEs. The institutions include, but are not limited to, the Small Enterprise Development Agency (SEDA), commercial banks and Khula Enterprise Finance.

### 8.1 Small Enterprise Development Agency (SEDA)

According to the South Africa Yearbook 2006/2007, the National Small Business Act of 1996 was amended in 2004 to provide for the merging of Ntsika Enterprise Development Agency and the National Manufacturing Advisory Centre to form the integrated Small Enterprise Development Agency (SEDA) on 13 December 2004.

According to SEDA (2010), SEDA is an agency of the South African Department of Trade and Industry (DTI). It is mandated to implement the government's small business strategy; design and implement a standard and common national delivery network for small enterprise development; and integrate government-funded small enterprise support agencies across all tiers of government.



SEDA's mission is to develop, support and promote small enterprises throughout the country, ensuring their growth and sustainability in co-ordination and partnership with various role players, including global partners, who make international beneficial practices available to local entrepreneurs. This is critical in alleviating poverty in South Africa, as the small enterprise sector has a significant and valuable contribution to make in sustainable and equitable social and economic development, as well as employment and wealth creation.

SEDA is committed to building the sector through the development of SMMEs, so that this incredible potential may be realised. To this end, it offers SMMEs advice, counselling, mentorship, guidance and access to vital contacts through its nationwide network of 9 provincial offices, 40 district branches, 4 mobile units, 46 Enterprise Information Centres and 29 Technology Incubators across the country.

Products and services to which entrepreneurs have access, include, among others, information and advice, training and mentoring, business planning and registration, incubation and technology transfer as well as sector specific training and development programmes.

According to Nieman and Nieuwenhuizen (2009), SEDA provides non-financial support to SMMEs and is the most extensive business network in South Africa. It does not give out loans or grants.

According to the Department of Trade and Industry (2007), SEDA provides the following key products and services, which are business support information and company registrations; business analysis and advisory service; exporter development programme; mentorship; supplier development; and skills development.

## 8.2 Khula Enterprise Finance

Khula Enterprise Finance Limited was established in 1996 in terms of a Department of Trade and Industry initiative and operated as an independent, limited liability company (Nieman & Nieuwenhuizen, 2009:202).

According to Khula Enterprise Finance (2010), the company is a wholesale finance institution which operates across the public and private sectors, through a network of channels to supply much-needed funding to small businesses. Khula's channels include South Africa's leading commercial banks, retail financial institutions, specialist funds and joint ventures. Its primary aim is to bridge the "funding gap" in the SMME market not addressed by commercial financial institutions.

Its financial products include loans, a national credit indemnity guarantee scheme, grants, institutional capacity building, equity funds and mentorship schemes (Nieman & Nieuwenhuizen, 2009:202).

According to Nieman and Nieuwenhuizen (2009), the roles of Khula are categorised into providing support to financial intermediaries as retail distribution networks by offering them in a sustainable manner loans, guarantees and seed funds; and direct services to SMMEs by offering a range of financial resources and information to the public.

## 8.3 Commercial banks

Commercial banks in South Africa include the First National Bank, the Standard Bank, Nedbank and ABSA. These banks provide different services to SMMEs including providing finance in the form of bank loans. According to Nieman and Nieuwenhuizen (2009), there has been criticism that banks do not help new businesses with finance, but that they are business ventures that have to minimise and manage their own risk.

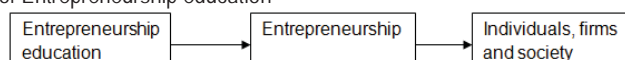
## 8.4 Universities

Universities in South Africa work with and assist SMMEs in the country and province through their community engagement initiatives.

## 9. The Relevance of Entrepreneurship Education

Entrepreneurship education fosters entrepreneurship which in turn results in positive outcomes in individuals, firms and the society (Albertiet al, 2004:3). Figure 1 below summarises the relevance of entrepreneurship education.

Figure 1: The relevance of Entrepreneurship education



**Source:** Researcher's owner's compilation

Figure 1 illustrates that the acquisition of entrepreneurship skills, concepts and knowledge will encourage more to engage in entrepreneurial activities. This will help individuals earn income and make some profits. Innovation and creativity gained through entrepreneurship education improves competitiveness and also success chances of already established firms. Entrepreneurship education also benefits the society at large through employment creation, provision of the much needed goods and services and economic growth.

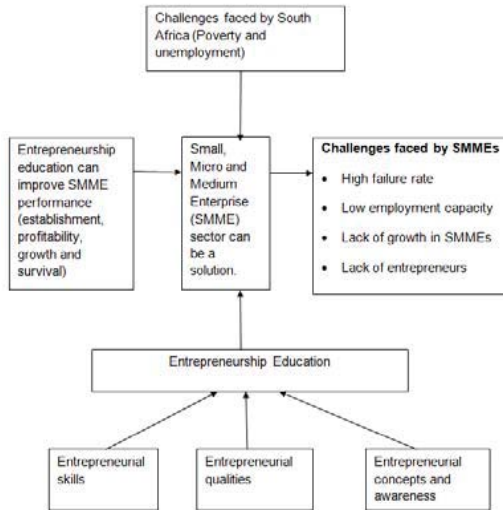
### 10. Conceptual Model of Entrepreneurship Education

It is now clear that SMMEs play a critical role in the nation especially in helping achieving socio-economic goals of employment creation, economic growth and equitable distribution of wealth. SMMEs also play a role in reducing poverty in the nation through the provision of goods and services. However, it will not be easily possible to achieve these generic goals and solve the challenges faced by South Africa today considering the challenges that are faced by this important sector (SMME sector).

SMMEs in South Africa are confronted by various challenges, including high failure rate, low employment capacity, lack of growth in SMMEs and lack of educated entrepreneurs. These challenges are said to be the reason of lack of entrepreneurship knowledge and skills and also inaccessibility of finance.

It is possible that entrepreneurship education can help improve SMME performance. This will mean improved rate of establishment of new ventures, increased profitability, growth and also survival of SMMEs. By providing and improving entrepreneurship education, the performance of business ventures should be able to improve and ultimately eradicate poverty and reduce unemployment in the nation. The conceptual model of entrepreneurship education is shown in figure 4.2 on the page.

**Figure 2:** Conceptual model of entrepreneurship education



**Source:** Researcher's own compilation

Figure 2 serves to show that acquiring entrepreneurial skills, qualities, concepts and awareness should increase chances of success in most SMMEs in the nation.

### 11. Conclusion and Recommendations

This paper concludes that entrepreneurship education is very important for the success of SMMEs in South Africa.

Although there are challenges confronting entrepreneurship education, strategies to improve entrepreneurship education should be implemented if the socio economic challenges such as unemployment and poverty are to be reduced in the country. The fact that South African government have realised the importance of entrepreneurship education in one step towards a better future, however all stakeholders, including SMME owners and managers should also make it their responsibility to improve entrepreneurship skills and knowledge. This paper also concludes that entrepreneurship education is relevant for the development of South Africa and Africa at large.

## References

- Aderemi, H.O., Ilori M.O., Siyanbola, W.O, Adegbite, S.A. and Aberejo, I.O. 2008. An assessment of the choice of performance of women entrepreneurs in technological and non-technological enterprises in South Western Nigeria. *African Journal of Business Management*, 2(10):165-176.
- Agupusi, P. 2007. *Small Business Development and Poverty Alleviation in Alexandra, South Africa*. School of Development Studies, University of East Anglia, Norwich, UK.
- Alberti, F., Sciascia, S. and Poli, A. 2004. Entrepreneurship Education: Notes on an ongoing Debate. Proceedings of the 14<sup>th</sup> Annual International Entrepreneurship Conference. University of Nopoli, Federico II, Italy, 4-7 July.
- Alberti, F.G., Sciascia, S. And Poli, A. 2005. The domain of entrepreneurship education: Key issues. *International Journal of Entrepreneurship Education*, 2:453-482.
- Antonites, A.J. 2003. *An Action Learning Approach to Entrepreneurial activity, innovation and opportunity finding*. PhD. University of Pretoria. [Online]. Available: <http://74.125.77.132/search?q=cache:DIzExwD91tmw.jftp/ftp.zew.de/pub> [Accessed: 10 July 2009].
- Arogundade, B.B. 2011. Entrepreneurship education: An imperative for sustainable development in Nigeria. *Journal of emerging trends in educational research and policy studies*, 2(1):26-29.
- Bbenkele, E And Ndedi, A, A. 2010. *Fostering Entrepreneurship Education in South Africa: The Roles of SETA*. (Online) Available: <http://www.worldsustainable.org/index.php/books/africa/volume2> [Accessed 07 January 2012].
- Bbenkele, E.K. 2007. An investigation of small and medium enterprises perceptions towards services offered by commercial banks in South Africa. *African Journal of Accounting, Economics, Finance and Business Research*, 1(1):13-25.
- Block, Z. And Stumpf, S.A. 1992. Entrepreneurship Education Research: Experience and Challenge. In Sexton, D.L. and Kasarda, J.D. *The state of the art of entrepreneurship* PWS-Kent.
- Botha, M. 2006. *Measuring the effectiveness of the women entrepreneurship programme as a training intervention, on potential, start-up and established women entrepreneurs in South Africa*. Unpublished PhD thesis, University of Pretoria.
- Botha, M., Nieman, G.H. And Van Vuuren, J.J. 2006. *Evaluating the women entrepreneurship training programme: A South African Study*. *International Indigenous Journal of Entrepreneurship, Advancement, Strategy and Education*.
- Brockhaus. R. 2001. Foreword. In Brockhaus, R., Hills, G., Klandt, H. and Welch, H. *Entrepreneurship Education. A global view*. Aldershot: Ashgate.
- Burger, L., O'Neill, C. And Mahadea, D. 2005. The impact of previous knowledge and experience on the entrepreneurial attitudes of grade 12 learners. *South African Journal of Education*, 25(2):89-94.
- Charney, A. And Libecup, D.B. 2000. *The impact of Entrepreneurship Education: An evaluation of the Berger Entrepreneurship Program at the University of Arizona, 1985-1999*. Kansas City, M1. The Kauffman Centre for Entrepreneurial Leadership.
- Clover, T.A. And Darroch, M.A.G. 2005. Owner's perceptions of factors that constrain the survival and growth of small, medium and micro agribusinesses in KwaZulu Natal, South Africa. *Agrekon*, 44(2):238-263.
- Co, M.J. And Mitchell, B. 2005. *Entrepreneurship Education in South Africa; A nationwide survey*. Int Ent. 2005. School of Management. University of Surrey.
- Co, M.J. And Mitchell, B. 2006. *Entrepreneurship in South Africa: A nationwide Survey*. *Education and Training*, 48 (5):348-359 (Online) Available: <http://www.emeraldinsight.com/0040-0912.htm> [Accessed 25 January 2012].
- Co, M.J., Groenewald, J., Van Zyl, J., Visser, K., Train, W. And Emanuel, B. 2006. *Entrepreneurship. Fresh perspectives*. Prentice Hall, South Africa.
- Consortium Of Entrepreneurship Education. 2004. (Online) Available: [http://www.entre-ed.org/\\_entre/lifelong.htm](http://www.entre-ed.org/_entre/lifelong.htm) [ Accessed 24 October 2011].
- Dana, L.P. 2001. The education and training of entrepreneurs in Asia. *Education and training*, 43(8/9):405-415.
- Darroch, M.A.G. And Clover, T.A. 2005. The effects of entrepreneurial quality on the success of small, medium and micro agribusinesses in KwaZulu Natal, South Africa. *Agrekon*, 44 (3):321-343.
- Davies, T.A. 2001. *Enhancing competitiveness in the manufacturing sector: Key opportunities provided by interfirm clustering*. *Competitiveness Review*, 11 (2):4-6.
- Department Of Trade And Industry (DTI). 2005. *South African Women Entrepreneurs- A burgeoning force in our economy*. [Online]. Available: <http://www.thedti.gov.za/sawen/SAWENreport2.pdf> [Accessed 14 September 2011].
- Department Of Trade And Industry (DTI). 2007. *Intergrated Small enterprise Development Strategy and Implementation update*. Presentation to the consultative forum of the Council.
- Devins, D., Johnson, S. And Sutherland, J. 2004. *Employer characteristics and employee training outcomes in the United Kingdom*

- SMEs: A multivariate. *Journal of Small Business and Enterprise Development*, 11(4): 449-457.
- Dodescu, A. And Badulescu, A. 2010. Entrepreneurship Education and Training. Case study: The AntrES programme on Women Entrepreneurship in Western Romania. *Proceedings of the 5<sup>th</sup> WSEAS International Conference on Economy and Management transformation*, 2.
- Driver, A., Wood, E., Segal, N. And Herrington, M. 2001. *Global Entrepreneurship Monitor. South African Executive Edition*.
- Drucker, P.F. 1985. *Innovation and entrepreneurship: Practice and Principles*. Heinemann. London.
- Eastern Cape Development Corporation. 2011. (Online). Available: [http://www.ecdc.co.za/about\\_the-eastern\\_cape\\_development\\_corporation](http://www.ecdc.co.za/about_the-eastern_cape_development_corporation) [Accessed 6 December 2011].
- Ekpe, I. 2011. Women entrepreneurs and economic development in Nigeria: Characteristics for success. *International Journal of Business and Social Science* 2(1):287-291.
- Entrepreneur Sa. 2005. South Africa's leading monthly on entrepreneurship: A profile. Nubia Media and Publishing. Randburg.
- Fatoki, O. And Garwe, D. 2010. Obstacles to the growth of new SMEs in South Africa: A principal Component analysis approach. *African Journal of Business Management*, 4(5):729-738.
- Foxcroft, M., Wood, W., Kew, K., Herrington, M. And Segal, N. 2002. *Global Entrepreneurship Monitor South African Report* [Online]. Available: <http://www.gbs.nct.ac.za/gbswebb/userfiles/gemsouthafrica2000pdf> [Accessed: 10 May, 2009].
- Frederick, H.H. 2007. Blended learning in entrepreneurship Education in the Asia Pacific: A Grounded Theory Approach to entrepreneurship pedagogy. Submitted to Small Enterprise Conference, September 2007.
- Freeman, S. 2000. Partnerships between small and medium enterprises and universities that add value. *Education and training*, 42(6):372-377.
- Global Entrepreneurship Monitor, 2004. Report on Women Entrepreneurship.[On-line]Available: <http://www.google.co.za/search?hl=en&q=GEM+women+report&btnG=Google+Search&meta=&aq=f&oq=>[Accessed 18 March 2009].
- Gouws, E. 2002. Entrepreneurship education: Implications for teacher training. *South African Journal of Higher education*, 16(2):41-48.
- Government Gazette Of The Republic Of South Africa. 2003. National Small Business Amendment Act [On-line] Available: <http://www.info.gov.za/gazette/acts/2003/a26-03/pdf> [Accessed 11 August 2011].
- Guroi, Y. And Astan, N. 2006. Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. *Education and Training*, 48(1):25-38.
- Herrington, M. And Wood, E. 2003. *Global Entrepreneurship Monitor, South African Report* [online] Available: <http://www.gbs.nct.ac.za/gbswebb/userfiles/gemsouthafrica2000pdf>. [Accessed 10.05.2010].
- Herrington, M. Wood, E. 2003. *Global Entrepreneurship Monitor, South African Report*. [Online] Available: <http://www.gbs.nct.ac.za/gbswebb/userfiles/gemsouthafrica2000pdf>. [Accessed 10 May 2010].
- Herrington, M., Kew, J. And Kew, P. 2009. *Global Entrepreneurship Monitor, South African report*. [Online]. Available: <http://www.gbs.nct.ac.za/gbswebb/userfiles/gemsouthafrica2000pdf> [Accessed 15 October 2009].
- Hisrich, R.D. And Peters, M.P. 2002. *Entrepreneurship. International 5<sup>th</sup> Edition*. McGraw Hill/ Irvin: Higher Education.
- Hisrich, R.D., Peters, M.P. And Dean A.S. 2008. *Entrepreneurship, 7th edition*, New York: McGraw-Hill Irwin.
- Isaacs, E., Visser, K., Friedrich, C. And Brijal, P. 2007. Entrepreneurship Education and Training at the Further Education and Training (FET) level in South Africa. *South African Journal of Education* 27:613-629.
- Jack, S.L. And Anderson, A.R. 1999. Entrepreneurship education within the enterprise culture: Productive reflective practitioners. *International Journal of entrepreneurial behavior and research*, 5(3):110-125.
- Jones, C. And English, J. 2004. A contemporary approach to entrepreneurship education. *Journal of education and training*, 46 (8/9): 416-423.
- Kabongo, J.D. And Okpara, J.O. 2010. Entrepreneurship education in Sub-Saharan African Universities. *International Journal of entrepreneurial Behaviour and Research*, 16(4):296-308.
- Kangasharju, A. 2000. Growth of the smallest: Determinants of small firm growth during strong macroeconomic fluctuations. *International Small Business Journal*, 19(1):28-43.
- Karimi, S., Chizari, M., Biemans, H.J.A. And Mulder, M. 2010. Entrepreneurship education in Iranian Higher Education: The Current State and Challenges. *European Journal of Scientific Research*. 48(1):35-50.
- Katz, J. 2003. The chronology and intellectual trajectory of American entrepreneurship education 1876-1999. *Journal of Business Venturing*, 18 (1):283-300.
- Keough, J. 2003. A better year in 2003. *Industrial distribution*, 92 (1):17-19.
- Klofsten, M. And Spaeth, M. 2004. Entrepreneurship training for regional growth and innovation: A Swedish case study and ten year retrospective. *Entrepreneurship training for regional growth and innovation*. (Online) Available; <http://www.sbaer.uca.edu/research/icsb/2004/papers%20pdf/130pdf> [Accessed 15 January 2012].
- Kunene, T.R. 2008. A critical analysis of entrepreneurial and business skills in SMEs in textile and clothing industry in Johannesburg, South Africa. Unpublished Doctoral Thesis. University of Pretoria, South Africa.
- Ladzani, W.M. And Van Vuuren, J.J. 2002. *Entrepreneurship Training* [On-line] Available: <http://icbm.bangkok.googlepages.com/48.Zaini.Jamaludin> [Accessed 15 March 2008].
- Lange, T., Ottens, M. And Taylor, A. 2000. SMEs and barriers to skills development: A Scottish perspective. *Journal of European Industrial training*, 24(1):5-11.
- Ligthelm, A.A. And Cant, M.C. 2002. Business success factors of SMEs in Gauteng: A proactive entrepreneurial approach. UNISA. Bureau of market research. Research Report number 311. Faculty of Economic and Management Science.

- Lowe, R. And Marriot, S. 2006. *Enterprise, Entrepreneurship and Innovation- Concepts, Contexts and Commercialisation*. Butterworth-Heinemann.
- Luiz, J. 2002. Small Business Development Entrepreneurship & Expanding the Business Sector in a Developing Economy: The case of South Africa. *The Journal of Applied Business Research*, 18(2).
- Maas, G. And Herrington, M. 2006. *Global Entrepreneurship Monitor South African Executive Report* (Online). Available: <http://www.gbs.nct.ac.za/gbswebb/userfiles/gemsouthafrica2000pdf> Accessed: 10 May 2011].
- McClelland, D.C. 1961. *The achieving society*, Van Nostrand, Princeton, N.J.
- Mcgee, J., Thomas, H. And Wilson, D. 2005. *Strategy: Analysis and Practice*. London: McGraw Hill.
- McMullan, W.E. And Gillin, L.M. 2001. Entrepreneurship education in the nineties revised. In Brockhaus R, Hills G and Welsch H. (EDS) *Entrepreneurship education. A global view*. Aldershot. Ashgate.
- Morh, P., Fourie, L. And Associates. 2009. *Economics for South African Students*. 4<sup>th</sup> Edition. Pretoria: Van Schaik Publishers.
- Mueller, S.L. And Thomas, A.S. 2001. Culture and entrepreneurial potential: A nine country study of locus of control and innovativeness. *Journal of business venturing*, 16(1):51-75.
- Mutezo, A.T. 2005. *Obstacles in the access to SMME finance: an empirical perspective on Tshwane*. Unpublished Thesis. University of South Africa.
- Nasser, M.E., Du Preez, J. And Herrmann, K. 2003. Flight of the young Flamingoes: Futures for young entrepreneurs in South Africa. *Futures*, 35 (4):393-401.
- Nieman, G. 2001. *Training entrepreneurs and small business enterprises in South Africa: A situational analysis*. Education and Training, 43(8/9):445-450.
- Nieman, G. And Neuwenhuizen, C. 2009. *Entrepreneurship: A South African Perspective*. Pretoria: Van Schaik.
- Nieman, G. And Pretorius, M. 2004. *Managing growth. A guide for entrepreneurs*. Cape Town: Juta and Co. Ltd.
- Nieman, G.H., Hough, J. And Nieuwenhuizen, C. 2003. *Entrepreneurship: A South African Perspective*. Pretoria: Van Schaik Publishers.
- Nieuwenhuizen, C. 2004. *Basics of entrepreneurship*. Lansdowne, Cape Town: Juta & Co. Ltd.
- North, E. 2002. A decade of entrepreneurship education in South Africa. *South African Journal of Education*. 22(1):22-27.
- O'Neill, R.C. And Viljoen, L. 2001. Support for female Entrepreneurs in South Africa: Improvement or decline? *Journal of family ecology and customer sciences*, 29:37-44.
- Peterman, N. And Kennedy, J. 2003. Enterprise Education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship Theory and Practice*, 28:129-144.
- Pretorius, M. And Shaw, G. 2004. Business plan in bank-decision making when financing new ventures in South Africa. *South African Journal of Economics and Management Science* 7(2): 221-242.
- Pretorius, M. 2001. *A training model to enhance micro and small business start-ups in South Africa*. Unpublished Thesis. Pretoria Technikon. Pretoria.
- Pretorius, M., Millard, S.M. And Kruger, M.E. 2005. Creativity, Innovation and Implementation: Management experience, venture size, life cycle stage, race and gender as moderators. *South African Journal of Business Management*, 36(4):55-68.
- Pretorius, M., Van Vuuren, J.J. And Nieman, G.H. 2005. Critical evaluation of two models for entrepreneurial education: An improved model through integration. *International Journal of educational Management*, 9 (9):413-427.
- Rae, D. 2000. Understanding entrepreneurial learning: A question of how? *International Journal of entrepreneurial behaviour and research*, 6: (3):145-159.
- Raposo, M. And Do Paco, A. 2010. Special issue: Entrepreneurship and education-links between education and entrepreneurial activity. *International Entrepreneurship and Management Journal*
- Robertson, M., Collins, A., Medeira, N. And Slater, J. 2003. Barriers to start-up and their effect on aspirant entrepreneurs. *Education and Training*, 45(6):308-316.
- Robertson, P.L. 2003. The role of training and skilled labour in the success of SMEs in developing economies. *Education and Training*, 45(9):461-473.
- Rogerson, C.M. 2001. Successful SMEs in South Africa: the case of clothing producers in the Witwatersrand. *Journal of Development Southern Africa*, 17(5) December 2000.
- Simpson, M., Tuck, N. And Bellamy, S. 2004. Small business success factors: The role of education and training. *Education and Training*, 46(9):481-491.
- Small Enterprise Development Agency. 2010. (Online) Available: <http://www.seda.org.za/Pages/Seda-Welcome.aspx> [Accessed 21 May 2010].
- Solomon .G.T. 2007. An examination of entrepreneurship education in the United States. *Journal of Small Business and Enterprise Development*, 14 (2):168-182.
- South Africa. 1996. Republic of South Africa. National Small Business Act, 102 of 1996. Government Gazette.
- South African Yearbook. 2006/2007. (Online) Available: <http://www.gcis.gov.za/docs/publications/yearbook/htm> [Accessed 20 April 2011]
- Stokes, D., Wilson, N. And Mador, M. 2010. *Entrepreneurship*. South Western, Centage Learning.
- Sullivan, R. 2000. 'Entrepreneurial learning and mentoring'. *International Journal of Entrepreneurial Behaviour and Research*, 6(3):160-175. Sutherland (2004).
- Swanepoel, E., Strydom, J.W. And Nieuwenhuizen, C. 2010. An empirical analysis of a private company's corporate social investment in SMME development in South Africa. *South African Business Review*. 14(1):58-78.

- Terre Blanche, M. And Durrheim, K. 2002. Research in practice: Applied Methods for the social Sciences. Cape Town: University of Cape Town.
- The Consortium Of Entrepreneurship Education. 2004. Available at [http://www.entre-ed.org/\\_entre/lifelong.htm](http://www.entre-ed.org/_entre/lifelong.htm).
- Thomas, A.B. 2004. Research Skills for Management Studies. London & New York: Routledge.
- Timmons, J.A. And Spinelli, S. 2007. New venture creation: entrepreneurship for the 21<sup>st</sup> century. Boston: McGraw Hill.
- Tobias, J.M. And Ingrams, A. 2010. Creating a different kind of an innovator: Using health communication theory in Entrepreneurship education to foster behaviour change among entrepreneurship students in Sub-Saharan Africa. *Journal of education for International Development* 4 (3):1-20.
- Toye, J. 2002. Research summary. Centre for study of African economies. University of Oxford.
- Tustin, D. Ligthelm, A.A. Martins, J.H. And Van Wyk, H.J. 2005. Marketing Research in Practice. Pretoria: Unisa Press.
- Tustin, D.H. 2003. Small business skills audit in peri-urban areas of Northern Tswane. UNISA. Bureau of Market Research. Research Report number 315. Faculty of Economic and Management Science.
- Umsobomvu Youth Fund. 2002. Entrepreneurship skills development and business support needs of potential and existing young entrepreneurs. Witwatersrand University, South Africa.
- Van Vuuren, J. And Nieman, G. 1999. "Entrepreneurship Education and Training: A model for Curriculum/Syllabi design" in Raffa, M (Eds), Proceedings of the 44<sup>th</sup> World Conference of the International Council for Small Business (ICSB).
- Vinturella, J.B. 1999. The entrepreneur's field book. Prentice Hall, Upper Saddle River.
- Volkman, C. 2004. Entrepreneurship studies- An ascending academic discipline in the twenty-first century. *Higher Education Europe*, 29(2):177-185.
- Von Broembsen, M. Wood, E. And Herrington, M. 2005. Global Entrepreneurship Monitor, South African Report (Online). Available: <http://www.gbs.nct.ac.za/gbswebb/userfiles/gemsouthafrica2000pdf> Accessed: 10 May, 2011]
- Wickham, P.A. 1998. Strategic Entrepreneurship: A Decision Making Approach to New Venture Creation and Management. Pitman, London
- Wickham, P.A. 2001. Strategic Entrepreneurship. A decision-making approach to new venture creation and management. 2<sup>nd</sup> Edition. United Kingdom. Prentice Hall.