

Chapter 4: Acquiring skills

4.1 Introduction

This chapter investigates ways and means of acquiring the key and supporting skills examined in the previous two chapters. The chapter includes a literature analysis of education and training theory in the context of entrepreneurship and small business. As stated in chapter 3, this review is a brief look at training as a method of acquiring these skills for enhancing SME and entrepreneurial development. As in Nieman (2001:448), training of SMEs in this chapter is discussed as part of the study undertaking and not only specific to training. This chapter presents propositions linking training, skills development and acquiring of skills to the conceptual model presented in chapters 2 and 3 above.

The specific focus here is to eliminate any skills identified in the review if they are not transferable or learnable. This chapter presents the final model of assignable skills that SMEs must acquire to succeed in the entrepreneurship process and provides guidelines for selecting skills that the SMEs are requested to rank in the survey questionnaire.

The last section of this chapter formulates 3 more propositions linking the identified skills (in the model) and training as a method of acquiring these skills. These propositions will be added to the propositions developed in chapters 2 and 3 and tested in the empirical research.

4.2 Acquiring of skills

Commentators across the economical spectrum agree that a highly skilled workforce and the development of the abilities and skills of SMEs are key to increased competitiveness and sustainable growth (Lange et al: 2000:5; Tustin, 2003:43; Rogerson, 2001a:117, Nafukho, 1998:100, Volkman, 2004:1; Lowe & Marriott, 2006:105). In order to prevent business failures and to promote SME growth, the lack of appropriate skills must be addressed (MacMahon & Murphy, 1999:35; Kangasharju, 2000:30). The ability to learn and acquire skills seems to be the major difference between organizations that grow and those that find it difficult to grow (Vesselov, 2002:4; Robertson, 2003:461; Henry, Hill &

Leitch, 2005:100). But exactly how do people learn to work in entrepreneurial ways? (Rae, 2000:145).

Despite a growing body of literature in the field there is still considerable uncertainty as to whether entrepreneurs are born or made (Henry et al, 2005:98; Botha, 2006:48; Klofsten, 2000:343). However many developers, economist and investors are content to gamble on the notion that entrepreneurship can be cultivated in individuals (Rwigema & Venter, 2004:48; GEM, 2004:19) and that entrepreneurs can be created and made better by acquiring, developing, practising and refining certain behaviours (Klofsten & Spaeth, 2004:5; Henry et al, 2005:107).

It has been argued that acquiring and developing entrepreneurial competencies is more important in the entrepreneurial process than even direct provision of financial resources and consulting support to the entrepreneur (Pretorius, 2001:223, Ladzani & van Vuuren, 2002:158; Nasser et al, 2003:399; Lange et al, 2000:6). The object of skills acquisition can be defined as provoking the union of an actor and a project or process element (Pretorius et al, 2005b:417; Miller et al, 2003:216).

Many studies do suggest that entrepreneurial and management skills (which seem indispensable for the running of successful SMEs) can be developed through a combination of experience, learning, skills transfer, apprenticeship, education and training (Dana, 2001:405, Ibrahim, Soufani, Poutziouris & Lam, 2004:474; Morris et al, 1996:72; Nieman et al, 2003:12; Robertson, 2003:470; Toye, 2002:26; van Vuuren & Nieman, 1999:4; Rae, 2000:145).

Education and training refers to the extent which all levels of the education system are effective in providing instruction and experience in the creation or management of SMEs (GEM, 2002c:18). Education and training are said to be key elements in successful venture creation (GEM, 2005:5). To this end many African governments' efforts to solve youth unemployment problems have resulted in policy initiatives aimed at raising skills levels through education and training (Hill & Stewart, 2000:105; Devins, Johnson & Sutherland, 2004:449, Keough, 2003:17; Massey, 2004:458; De Faoite, Henry, Johnston & Van der Sijde, 2004:440; Cook, Belliveau & Sandberg, 2004:404). Education and

training is said to facilitate greater levels of participating and succeeding in entrepreneurship (GEM, 2002c:29).

However there are doubts about whether education and training actually influence SME performance or contribute significantly to SME success (Kitching, 1998:111; Devins et al, 2004:449). There is a limit to what can actually be taught, and moreover many argue that personal experience is the best teacher of entrepreneurship (Freeman, 2000:372; Deakins & Freel, 1998:149; Massey, 2004:458).

Although education and training alone will not address the survival needs of many SMEs they play a crucial role in the support of SMEs as they facilitate initiation and development of entrepreneurial activities (van Vuuren & Antonites, 2001:1; Mayrhofer & Hendriks, 2003:1; Ladzani & van Vuuren, 2002:158). Other studies have shown evidence that education and training interventions led to a positive effect on success and growth of the majority of SMEs (Simpson et al, 2004:481; Keough, 2003:17; Hill & Stewart, 2000:105; Kitching, 1998:111; Ibrahim et al, 2004:478; Mueller & Thomas, 2001:68).

Lack of appropriate education and training leads to skills shortages and thus hinders entrepreneurship (Pretorius & Shaw, 2004:222; Ligthelm & Cant, 2002:6, GEM, 2001a:4; Tustin, 2001:126; Ladzani & van Vuuren, 2002:156; Tustin, 2003:38). SME failure in many countries could have been avoided if appropriate management training and counselling had been provided before the situations reached critical conditions (Govender, 1994:114).

Thus the creation of entrepreneurs is partially dependent on the creation and advancement of efficient education and training programmes (Pretorius et al, 2005b:413; Gurol & Atsan, 2006:26; Henry et al, 2005:100). Ensuring access to education and training programmes that train entrepreneurs and upgrade the capacity of SMEs is cited as the main way in which the government can assist SMEs' growth and reduce failure (Luiz, 2002:68). Governments & NGOs can support SMEs through education, training and business advice (Clover & Darroch, 2005:257).

Education and training is considered important for economic prosperity (Sullivan, 2000:162). The USA is considered world leader in the educating and training of entrepreneurs (GEM, 2002c:18). In the 1990s in South Africa, the new government's

Reconstruction and Development Programme (RDP) placed a major emphasis on entrepreneurial awareness, education and training (Klofsten & Spaeth, 2004:8). The education and training institutions could provide the framework for the SME owner-manager to confront and address deficiencies in his business (Hankinson, 2000:94; Markman & Baron, 2003:296). A distinction has been made between entrepreneurial education and entrepreneurial training (Botha, 2006:61).

4.3 Entrepreneurship education

Education is defined as the theory and practice of teaching or information about training in a particular subject (*Oxford Dictionary*, 2005). Education has a strong impact on entrepreneurship (GEM, 2001b:16). The plea for the advancement of entrepreneurship in the formal school curriculum has come from various sources, including the formal education sector, the private sector and non governmental organizations (North, 2002:24). Entrepreneurship and small business education has been rapidly promoted in education institutions in the USA and in Europe, Asia and Africa (Gurol & Atsan, 2006:27; Bygrave, 1997:2). In South Africa, Umsobomvu (2002:2) strongly recommended that entrepreneurship education needs to be integrated into the school curriculum at all levels from kindergarten to university, to build a strong entrepreneurial culture.

The following are said to be benefits of entrepreneurial education (GEM, 2003a:10; Botha, 2006:47; Viviers et al 2001:16; Henry et al, 2005:102; Vesseleov, 2002:27).

- Entrepreneurial education plays a role in raising awareness of the nature and importance of entrepreneurship to the economic development of the country.
- Entrepreneurship education contributes towards building an entrepreneurship culture in a given country.
- Entrepreneurial education can develop attitudes, perceptions and mindsets that are not averse to failure, competition and risk-taking.
- Entrepreneurial education can increase intrinsic motivation and self confidence.
- Students in entrepreneurship education can become aware that entrepreneurs can be made and are not necessarily born.

- Entrepreneurial education can help aspiring entrepreneurs by teaching them the practical skills required in SME start-up and management towards growth.
- Starting a business is risky as it is, but the chances of success can be enhanced if the problems anticipated are understood and solutions investigated prior to the business start-up through education.

However there are arguments that the education field does not lend itself to the possibility of start-up because the education system does little to nurture entrepreneurial activities (Driver et al, 2001:29). In South Africa this is said to be due to many challenges in entrepreneurial education including:

- Overall lack of entrepreneurial elements in the education system (GEM, 2002a:15).
- Inappropriate learning methodologies (Botha, 2006:51).
- Most education programmes not being outcome or skill development based (Ladzani & van Vuuren, 2002:155).
- Typically, entrepreneurship is not promoted as a career option with the education system promoting a large-firm culture whereby the majority of students plan to work for someone else after graduation (Antonites, 2003:31).

Following Umsobomvu's (2004:iv) assertion that "various authors are of the opinion that more emphasis should be placed on training than on business education", this study focuses only on entrepreneurship training.

4.4 Entrepreneurship training

Training is defined as teaching a particular skill or type of behaviour through regular practice and instruction (*Oxford Dictionary*, 2005). Many studies have proved that entrepreneurs can be trained to stimulate entrepreneurial activity and performance (Antonites, 2003:31). The trainability of entrepreneurs is accepted and supported by McClelland (1961:1), Gibb (1993:3), Hisrich & Peters (2002:19) and Pretorius & van Vuuren (2003:515) among others.

Staff training is linked with success in virtually all successful companies which provide training to their employees to create effective workers who can attain organizational

goals and improve their expertise (Rowden, 2002:82; Darroch & Clover, 2005:338; Timmons 1999:219; Rogerson, 2001b:269).

Training complements the early stage of education by capacitating entrepreneurs with the skills needed to set up, run and grow their own businesses (Devins et al, 2004:456; Erikson, 2002:277). The following are said to be benefits of appropriate entrepreneurial training interventions:

- Training improves the odds of getting things right and reduce failure rates (Viviers et al, 2001:16).
- Training facilitates the implementation of strategy by providing skills to perform in the jobs and know-how of procedures and business processes that help the SME implement strategy with fewer difficulties (Freeman, 2000:376; Themba et al, 1999:111).
- Training improves skills that enhance SME entrepreneurial performance in terms of productivity, competitiveness and profitability, and increase in sales, assets and employees (Clover & Darroch, 2005:257; Henry, Hill & Leitch, 2005:102).
- Training helps owner-managers to learn how to prevent and solve business problems (Fernald, Solomon & Bradley, 1999:312; Robertson et al, 2003:314; Ladzani & van Vuuren, 2002:156).
- Training fosters a continuous learning and re-engineering culture that enables SMEs to adapt to change and keep ahead in a highly competitive and turbulent environment (Lange et al, 2000:6; Sackett et al, 2003:299).
- Training and practice can enhance leadership and can 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 (McClelland, 1987:220; Ibrahim et al, 2004:478).
- Training can help identify enterprise growth patterns and successfully address key barriers to entrepreneurship (Schamp & Deschoolmeester, 1998:141).
- A first business attempt may fail, but a trained and educated entrepreneur will retain knowledge and abilities to try again (Bridges.org, 2002:6).

Since it is assumed that most emerging small business owner-managers start their enterprises without prior entrepreneurship training (Ladzani & van Vuuren, 2002:156), it can be argued that SME survival could be enhanced by providing appropriate skills

training programmes that impart relevant and transferable skills (Strydom & Tustin, 2003:14; Darroch & Clover, 2005:338; Bridges, 2002:6; Ibrahim et al, 2004:478).

Challenges of entrepreneurial training

While there are numerous initiatives and efforts of various role-players in the training of entrepreneurs in South Africa (Nieman, 2001:445), many people blame the education and training system in South Africa for the lack of entrepreneurial excellence in South Africa (North, 2002:26; GEM, 2003b:13). Shortages of management skills raise questions about the availability and quality of training provided to potential entrepreneurs (Freeman, 2000:372).

Certain barriers exist both on the supply side and execution of entrepreneurship training and skill development initiatives (Ibrahim & Soufani, 2002:425; Klofsten & Spaeth, 2004:17). Identifying and clarifying these barriers to SME skills development in more detail is essential for a successful training strategy that will see the full potential of SMEs realized (Lange et al, 2000:6). The barriers can be categorized into cultural, diagnostic, finance, service provider, appropriateness, content, and relevance factors.

Culture

Culture has important consequences for the success of a training strategy capital (Lange et al, 2000:7). Culture influences attitudes, understanding and behaviour of SMEs about training which tends to influence the quality and the quantity of its provision (Mayrhofer & Hendriks, 2003:599). Even if a learning programme includes the best knowledge and skills content about venture start-ups as its outputs, there is no guarantee that participants will act entrepreneurially unless their mindset, their willingness to take risks, their confidence, attitude and behaviour have been influenced as well (Pretorius et al, 2005b:423).

While the importance of training is trumpeted by government, SMEs are not doing enough to capacitate themselves with skills that are key for business performance (Hankinson, 2000:94). One of the major challenges to skill development is related primarily to barriers resulting from mental paradigms of SME owners and their attitudes towards skills development (Matlay, 2001:400). A significant number of SME owners/managers are hesitant to engage in continuous learning or regular formal training

(Lange et al, 2000:7; Strydom & Tustin, 2003:4; Pittaway & Thedham, 2005:403). There is also a lack of interest / commitment from the SME workforce (Kekale, Pirolt & Falter, 2002:277); since when the training was offered, the actual rates of the usage of training opportunities and programmes were very low (Matlay, 2004:512; Patton, Marlow & Hannon, 2000:11).

The root of this could lie with either a communicational or educational impasse. Many SMEs are uncertain of and misunderstand the role of entrepreneurship training (Mayrhofer & Hendriks, 2003:599). Many SMEs do not believe that training pays off in the short term (Fernald et al, 1999:321; Lawless et al, 2000:313), nor are they convinced of the link between training and business growth / profits (Mayrhofer & Hendriks, 2003:599; Lange et al, 2000:9). This is supported by researchers who deem that there is still a need to know, for sure, whether training people in these identified core competencies will facilitate entrepreneurial success (McClelland, 1987:232) and those who argue that SMEs learn better from experience than from courses delivered in classrooms (Freeman, 2000:375; Wasilczuk, 2000:93; Pittaway & Thedham, 2005:403).

Many SMEs fail to plan for training (Lange et al, 2000:8). They view training as a crisis-driven remedy that is taken when necessary as a way of responding to urgent functional needs, and not as part and parcel of a continuous long-term skills development plan (Massey, 2004:465; Lawless et al, 2000:313). Many SMEs do not seek advice as routine, but usually when it is too late to do anything about it (Hankinson, 2000:94). Even if they do plan for training, the actual steps many SME owners take in professional development remain illusory (Klofsten & Spaeth, 2004:17; Miller et al, 2003:228).

Diagnosis

Very little is known about the training needs of entrepreneurs and their workforce (Matlay, 2001:395). Many SME owners are unaware of why they need certain business skills to be successful (Massey, 2004:465; Strydom & Tustin, 2003:2). They fail to recognize their need for training and lack information on the impact of investment in business skills development (Lawless, 2000:313; Kekale et al, 2002:277).

The SMEs who are aware of the need for training often misdiagnose problem areas, are often unable to describe their training needs, and do not correctly assess how developing

those skills will contribute to the SME (Strydom & Tustin, 2003:2; Watson et al, 1998:219; Lange et al, 2000:10). There is a lack of robustness in the way SMEs try to ensure that there is a fitting relationship between the services on offer, the training selected, the needs of employees in terms of their jobs and the needs of the SMEs (Massey, 2004:465; Matlay, 2004:504).

Furthermore there are barriers related to the knowledge of what learning opportunities are out there (Mayrholer & Hendriks, 2003:599). Only a relatively small proportion of SMEs are aware of the existence and availability of industry training opportunities in the market (Matlay, 2004:511; Klofsten, 2000:340). They do not know where to find sources of information on skills, the different training offerings available and the relevant skill development initiatives plus training strategies available (Strydom & Tustin: 2003:2; Lange et al, 2000:10; Kekale et al, 2002:277).

Finance

One of the major challenges to skills development is the cost or perceived cost of training and learning. The inherent problem remains that small businesses have limited financial resources and often cannot afford to send their workers for formal training or hire professional trainers to conduct internal training (Lange et al, 2000:10; Strydom & Tustin, 2003:4; Klofsten, 2000:340; Matlay, 2001:402).

Many SMEs' success in upgrading their skills and gaining access to technology may depend crucially on subsidized education and training infrastructure provided by their governments (Robertson, 2003:461). The South African government provides funds for business non-financial support services and incubators that provide space and facilities for SMEs. Its main agent, Ntsika Enterprise Promotions, works with an estimated 97 LBSCs (local business support centres), which are accredited countrywide to give non-financial support services to SMEs (Nieman, 2006:6; Botha, 2006:70; Von Broembsen, 2003:6). However, access to resources to pursue training is a challenge for many SMEs who struggle to access government sponsored training, skills grants and financial assistance (Hankinson, 2000:94; Matlay, 2001:402; Klofsten, 2000:340).

Another possibly sunk cost of training is the real danger of training employees in small firms and having them poached by competitors or having them move to another company, as they now possess more and transferable skills. Many SME

owners/managers may thus perceive training as a costly activity, with the probability of benefits reaped elsewhere being very high (Lange et al, 2000:9).

Time

Time constraints are cited by SMEs as a reason for not attending training (Mayrhoher & Hendriks, 2003:599), as many SMEs cannot afford the time spent away from work both for workers and for themselves (GEM, 2002a:37; Lawless, 2000:314). Thus most small firms prefer in-house training methods (Strydom & Tustin, 2003:14).

Appropriate and relevant training

A critical issue to be addressed if entrepreneurship is to be promoted in South Africa relates to the content of training in entrepreneurship (Nafukho, 1998:102). One of the major barriers to skill developments is the lack of access to appropriate, relevant and quality training programmes (Freeman, 2000:372; Ibrahim & Soufani, 2002:425; Robertson et al, 2003:314). SMEs are not getting the high-quality training they need to keep their companies competitive (Fernald et al, 1999:322; Watson et al, 1998:230). Factors that affect training quality include the unavailability of direct, clearly relevant, appropriate and formal training that will match their specific human resource development needs and limited resources (Matlay, 2001:401; Klofsten & Spaeth, 2004:8).

There is a gap between entrepreneurial needs and the aspirations of training offerings on entrepreneurship (Collins, Hannon & Smith, 2004:454; Patton et al, 2000:11). SMEs often feel that the government sets up initiatives that do not consider the needs of small businesses with regard to training (Lange et al, 2000:7). Most services offered to SMEs are inflexible, over-structured and supply driven, particularly services relating to finance, business management and HR; whereas the growth of SMEs is more often driven by market changes (Mayrhoher & Hendriks, 2003:596; Vesselov, 2002:11; De Faoite et al, 2004:445).

Moreover, many governments that offer training as SME support do not evaluate the effectiveness and impact of the training (Massey, 2004:464, Nieman, 2006:6). Most training programmes do not meet the needs or expectations of SMEs nor are they transferable to the workplace (Mayrhoher & Hendriks, 2003:599; Fernald et al, 1999:323).

The training emphasis of most service providers in South Africa seems to be more on conventional management training than entrepreneurial training (Nieman, 2001:448). The content of entrepreneurship courses and programmes fails to address the question of creativity and innovation (Pretorius et al, 2005b:424). Most programmes focus more on commerce and services, with little training for market-related production (Nieman, 2006:9; Von Broembsen, 2003:19). Thus most of these are not lined up with the SME aim of increasing productivity (Cook et al, 2004:398). What many SME training programmes also lack is the training of entrepreneurs which can change their behaviour to engage in the start-up process (Pretorius et al, 2005b:423) and to overcome self-defeating beliefs (Markman & Baron, 2003:296).

The failure of some programmes to take on board the cultural, educational and social background of local entrepreneurs leads to ineffective training and support programmes (De Faoite et al, 2004:440). Some of the programmes have been successful in other industries or countries as they were tailored for their particular needs, but when imported to other areas/environments they prove unsuitable and ineffective for SMEs (Robertson, 2003:470; Dana, 2001:405; Themba et al, 1999:110).

Service providers

Training of SMES in South Africa is still rather fragmented and probably in the hands of too many role-players, whose aims and objectives are quite often far removed from what the SME sector expects or demands (Nieman, 2001:449). It is estimated that there are 9 395 service providers involved in business, technical and administrative training in South Africa, of which 113 are in Gauteng (Rwigema & Venter, 2004:10). This proliferation of role-players includes the following stakeholders (Matlay, 2004:506; Rogerson, 2004:769; Rowden, 2002:79; Nasser et al, 2003:397; North, 2002:25; Fletcher, 2006:436; GEM, 2002c:19; Umsobomvu, 2002:4; Umsobomvu, 2004:12).

- Government agencies and government-sponsored organizations.
- Local Business Service Centres.
- Tertiary institutions; universities and colleges and technikons.
- NGOs and community-based organizations.
- Entrepreneurs and other individuals connected to the business.
- Foreign donor agencies.

- Chambers of commerce, trade associations and Industry training organizations (ITO) including South African institute for entrepreneurship.
- Private training consultancies and mentors.
- National vocational qualifications, apprenticeships and learnerships.
- Banks (Standard bank with Mindset, ABSA, FNB and Nedbank SME desks).
- Youth development programmes like Umsobomvu, Junior Achievement and Maths centre.
- Small business development programmes like SBDC, The Business Partners, The Education with Enterprise Trust, Entrepreneurship Education Initiative, Addicted to Business, Entrepreneurs on the Move.

Inadequate competency and credibility of the service provider has been cited as a major barrier to skills development (Klofsten & Spaeth, 2004:17). SME owners are often sceptical of organizations offering training, especially when the service provider has no or little experience or understanding of the business environment that the SMEs are operating in (Mayrhofer & Hendriks, 2003:599, De Faoite et al, 2004:445, Klofsten, 2000:340). Most service providers do not base their entrepreneurship training programmes on research (empirical and conceptual) on conditions on the ground (Ibrahim & Soufani, 2002:425).

Intervention types

There are clearly different interventions needed for the different stages of the entrepreneurship process (Henry et al, 2005:99). There is a difference between training targeted at the pre-start-up phase, focusing on training the aspiring entrepreneur, and the post-start up, focusing on training the established entrepreneurs or small business owners (Botha 2006:58). These differences are highlighted in table 4.3 below:

Table 4.1: Intervention types

Stage of business	Type of intervention needed per stage of business
Pre-start	Creation of ideas, assessment of opportunity, SME know-how, network's, decision making, counselling, planning.
Start-up (external)	Customer, supplier, financier consultation, business plan, premises, procurement and sourcing, seeking advice.

Start-up (Internal)	Finance, resources, marketing, administration, systems, secure expertise and staff, financial management, partners, balancing ownership and management.
Established business	New ideas, specialist guidance and investments, idea generation, spin off, technology, banking, accounting.
Growth	Market expansion, other opportunities, exports, product development, strategic approach, management skills, finance control of growth, trading, staff retention, development, networking, new technologies.
Decline	Confidence building, new markets, customers, money, strategic review, planning.
Termination	Legal advice and counselling.
All stages	Business sectors, business support, initiatives and incentives.
Other	Information on small business needs, use of database and research.

Source: Adapted from Botha (2006:60)

Different training methods

There are considerable differences in the ways in which intervention can occur (Botha, 2006:57) including the following:

- Experiential learning strategies including hands-on practicals, role models, forum for interaction between SME owners/managers, field trips, internship; on-the-job training (Cook et al, 2004:404; Freeman, 2000:372; Klostefn & Spaeth, 2004:11).
- Observational learning including case studies, role-plays, real world examples and scenarios (Cope & Watts, 2000:107; Hankinson, 2000:94; Cope, 2003:430).
- Instructor-centred strategies including expert advice, lecturing, presentations, handouts, videos, graphics equipment, job aids, one-on-one delivery; supervision and oral presentations (Deakins & Freel, 1998:147; Kekale et al, 2002:269; Klostefn, 2000:341).
- Individual learning strategies including learning from mistakes, long distance teaching, training manuals, videotapes, e-learning and online learning (Erikson, 2002:287; Henry et al, 2005:112; Lawless et al, 2000:312; Robertson et al, 2003:308).
- Interactive strategies including mentoring, counselling, face to face contact with local consultant; group discussions, team work, peer review, conferences, workshops, networking, and comparing their own approaches with others (Fernald et al, 1999:318; North, 2002:27; Rae, 2000:157; Cope, 2003:445; Porter, 2000:241; Sullivan, 2000:160; Porter, 2000:241).
- Internet based learning (Bridges, 2002:8; Goolnik, 2002; Rogerson, 2001a:117).

Recommendations for entrepreneurial training:

A well planned and effective team effort is required to put the South African economy on the road to victory. This can be done by a collective effort to search for new entrepreneurs as well as the training that inspire them to succeed (North, 2002:27). High-quality training must be substantiated by reduced failure rates, increased profits and growth of SMEs (Ladzani & van Vuuren, 2002:156).

All approaches and programmes have merit if guided by the context in which service provision occurs (Mayrhofer & Hendriks, 2003:596). The potential benefits of entrepreneurship training are significant (Themba et al, 1999:110) especially if the service provided can incorporate the recommendations below towards improving training of SMEs in South Africa:

In terms of the process of developing such a training programme the following is recommended:

- Service providers should benchmark their services with successful similar institutions (Ladzani & van Vuuren, 2002:157; Matlay, 2004:512).
- Since entrepreneurship training is new, role-players in training should collaborate more closely to network, lobby the education authorities, share data, share their experiences, ideas and educational materials in order to identify the needs of the SMEs as well as the common infrastructure needed to determine the relevant training and entrepreneurial direction (Robertson et al, 2003:308; Volkmann, 2004:1; Ibrahim & Soufani, 2002:425).
- Training must be closely related to SME environment, backgrounds and experience and be based on managing larger enterprises (Lawless et al, 2000:308; Kekale et al, 2002:269).
- Imported training programmes need to be adapted to address cultural, social and economic issues and not be based on Western models that do not apply to the local environment (Klofsten, 2000:341; Collins et al, 2004:454).

In terms of the actual implementation of the program the following is recommended:

- Service providers must conduct systematic analysis of training needs (De Faoite et al, 2004:440).

- Service providers must examine the role and effectiveness of entrepreneurship training and its impact on the immediate and long-term performance of SMEs (; Cook et al, 2004:404).
- Training services must be flexible, demand-driven and tailor-made services to address specific and real needs of SMEs and avoid one-size-fits-all policies and programmes (Mayrhofer & Hendriks, 2003:599; Robertson, 2003:470).
- The programme should be associated with a network of firms for practical experience and mentorship (Nieman, 2000:9; Sackett et al, 2003:298).
- Trainers must have all the equipment, tools and materials and supporting facilities needed for successful training implementation (Vesseleov 2002:15).

In terms of training content and curriculum development, it has been argued that existing training firms should revise their training materials to ensure they cover the activities necessary to train in a broad and holistic way (Klofsten & Spaeth, 2004:8; Freeman, 2000:375). Several authors including Henry (2005:102), Pretorius (2001:44), Erikson (2002:287), McClelland (1987:222), Viviers et al (2001:17), Friedrich et al (2003:2) and Schamp & Deschoolmeester (1998:154) have suggested that successful entrepreneurial training programmes must include the following content:

- Activities to identify and stimulate entrepreneurial drive, talents and skills.
- Activities to eliminate the risk-averse bias of many analytical techniques.
- Activities to develop empathy and support for all unique aspects of entrepreneurship.
- Activities to instil positive attitudes towards change.
- Activities to eliminate factors that may hinder entrepreneurship.
- Activities to develop competencies that may enhance the chances of SME survival and success in today's competitive environment.

The next section focuses on identifying the set of competencies that may enhance SME survival and success.

4.5 Training models

To get a set of these competencies, it was useful to review entrepreneurship training models which form the framework within which entrepreneurship training programmes target the transfer of certain skills in South Africa. This study limits itself to three training

models developed at the chair of entrepreneurship of the University of Pretoria as reviewed by Botha (2006).

Model 1: Entrepreneurial performance education model (E/P education model)

The first model reviewed is the model by van Vuuren and Nieman (1999). From the entrepreneurial performance model, equation 2.2 in chapter 2 of this study, van Vuuren and Nieman (1999:6) presented a model called the entrepreneurial performance education model, whose formula is illustrated by equation 4.1 as follows:

$$\uparrow E/P = f(aM \times b E/S \times c B/S) \quad (4.1)$$

Where

- $\uparrow E/P$ is defined as entrepreneurial performance.
- M = Motivation
- E/S = Entrepreneurial skills
- B/S = Business skills
- a, b, c, are constant coefficients

This model argues that training courses should cover training to impart the following skills (Nieman, 2001:445; van Vuuren & Nieman, 1999):

Table 4.2: Classification of skills constructs and related training

Construct	Skill category to be included in training
Entrepreneurial performance (E/P)	<ul style="list-style-type: none"> • Increasing productivity • Increasing the number and quality of employee • Increasing the net value of business • Increasing profitability • Setting up and or running the business
Motivation (M)	<ul style="list-style-type: none"> • Fostering the need for achievement • Increase in internal locus of control • Decision making • Leadership and visionary • Determination / Persistence • Guts

<p>Entrepreneurship skills training that covers the birth and growth of a business as training areas in a business as listed in this row</p>	<ul style="list-style-type: none"> • Assessing of oneself and team • Negotiation • Problem solving, conflict resolution, coping with stress and tension • Risk propensity • Creativity • Innovation • Opportunity identification • Role models • Networking • Change orientation
<p>Business skills training would cover all the conventional management training areas in a business as listed in this row</p>	<ul style="list-style-type: none"> • Planning and strategizing including business planning • Human relations • Marketing • Finance • Accounting • General management • Negotiating • Communication • Managing growth
<p>Technical skills training that covers the ability to use knowledge or techniques of a particular discipline to attain certain ends</p>	

Source: Own compilation adapted from Botha (2006:81)

Model 2: The entrepreneurial education model (E/E model)

The second model that was reviewed is that of Pretorius (2001:122), the Entrepreneurial Education model (E/E model), whose formula is illustrated by equation 4.2 as follows:

$$E/E = f \{ aF (bA x [cB/P x dE/S x eB/S]) \} \quad (4.2)$$

Where:

- E/E = entrepreneurship education for start-ups.
- F = facilitator's skills, knowledge and motivation.
- A = approaches used by facilitator.
- E/S = entrepreneurial success themes and knowledge.
- B/S = business skills and knowledge.

- B/P = business plan utilization.
- a, b, c, d, e are constant co-coefficients.

The major difference is that this model introduces the facilitator, but the skills to be imparted are similar, with motivation being included in the entrepreneurial success construct, which is the same as van Vuuren & Nieman's entrepreneurship skills construct but includes leadership and resilience. This model also emphasizes the business plan development and its uses, thus listing it as a separate construct and elevating it from being part of a group with the business management skills construct, as in van Vuuren & Nieman's (1999) model.

The education for improved entrepreneurial performance model (ED for ↑E/P model)

In 2005, Pretorius, van Vuuren & Nieman (2005b:422) presented the Education for Improved Entrepreneurial Performance (Ed for E/P) model whose formula is illustrated by equation 4.3 as follows:

$$\text{Ed for E/P} = f \{ aF \times bM \times [cE/S \times dB/S \times (eA + fB/P)] \} \quad (4.3)$$

Where:

- F = facilitator's ability, skills and experiences.
- M = motivation.
- E/S = entrepreneurial skills.
- B/S = business skills and knowledge.
- A = approaches of learning used.
- B/P = business plan utilization as an approach.
- a, b, c, d, e and f are constants coefficients.

This model incorporates human, venture and environmental conditions in training for entrepreneurial performance. It also integrates the two earlier models by Pretorius's (2001:122) and the van Vuuren & Nieman (1999:6) strengthening the weaknesses of each model and highlighting the strengths. Table 4.2 below adapts tables by Botha's (2006:81) and Antonites (2003:21) to focus only on the skills that the entrepreneur needs to be trained in according to the three models reviewed above.

Table 4.3: The improved entrepreneurship training model

Entrepreneurial performance (E/P)	Performance motivation (M)	Entrepreneurial skills (E/S) & entrepreneurial success themes	Business skills (B/S)	Business plan
Establishment / running of business	Motivate	Risk propensity	General	Elements
Growing the business	Mentors	Creativity and innovation	Marketing	Preparation
Recruitment	Role models	Opportunity identification	Legal	Presentation
Increasing productivity		Role model analysis (success factor)	Operational	Evaluation
Increasing profitability		Leadership	Human resource	
		Motivation	Communication	
		Attitude of participant	Financial	
		Social skills	Cash flow	
		Start-up skills	Networking	

Source: Own compilation adapted from Botha (2006:81)

4.6 Summary and propositions

From these three models summarised by table 4.2 and the literature review detailed in chapters 2, 3 and 4; it can be summarised that training programmes should strive to enhance a specific set of trainable skills in SMEs. This study follows Nieuwenhuizen & Kroon (2002), Kirzner (1973) and Thornhill & Amit (2003) to cluster and combine the skills into categories as follows:

1. Effective business systems and procedures. This includes business systems, procedures, processes & records, organizational structure, business planning systems, control mechanism, measurement systems, reporting systems and relationships, reward systems (Rwigema & Karungu, 1999:107).
2. Business linkages. This includes business associates, business contacts, industry clustering and networking.

3. Communication which includes competence in languages used in business, access to relevant information, informing, listening, clerical and administrative information.
4. Computer literacy. This includes information and communication technology, ICT applications, computer systems, typing, keyboard, internet, email, computer programming, data-processing, information networks and practices (Lawless 2000:313; Bridges, 2002:5; Chapman, 2000:260).
5. Creativity, innovation and opportunity identification. This includes the ability to create, to innovate, to be alert, to identify and to discern viable business opportunities (Rogerson, 2001a:137; Clover & Darroch, 2005:257).
6. Financial management. This includes cash flow management, working capital management, forecasting, costing, financial analysis, financial control, bookkeeping, accounting, capital budgeting, credit and collection management (Addis 2003:157; Rwigema & Venter, 2004:51).
7. Human Resource Management. This includes employee relations, delegation, organizational planning, leadership, managing personnel, employee training, career development, teamwork, job evaluation, vision, conflict management, personalities, characters and culture at work.
8. Legal. This includes business registration, government requirements, legislation, regulations, incentives, support, tax laws (Themba et al, 1999:105).
9. Life skills. This includes problem solving, time management, decision making, ability to handle stress, ability to handle change, learning ability and negotiating (Rowden, 2002; Mayrhofer & Hendriks, 2003:601).
10. Literacy. This includes reading, writing and mathematical numeracy.
11. Marketing. This includes marketing, sales, market research, business intelligence, customer care, customer relations promotions, competitors knowledge, competitor analysis, increasing sales, international trade, government tenders, securing contracts, market planning, product pricing, sales management, direct selling and distribution management (Strydom & Tustin, 2003:12; Fernald et al, 1999:316).
12. Operations. This includes quality control, production planning, production scheduling and efficient production techniques (Cornwall & Naughton, 2003:67).
13. Research & development including technical, market & product specific research.

14. Risk taking. This includes the ability to evaluate risks in the start-up and founding stage as well as risk management during the life cycle of the SMEs (North, 2002:26; Henry et al, 2005:102).
15. Role models. This includes the ability to learn from other successful entrepreneurs.
16. Securing resources. This includes identifying resources needed to start, run & grow business, matching of the resources with short and long term requirements, securing these and controlling resources for optimal deployment (Klofsten & Spaeth, 2004:10; Kodithuwakhu & Rosa, 2002:462; Mayrhofer & Hendriks, 2003:601).
17. Self motivation. This includes commitment, resilience, confidence building, motivation, self awareness, self confidence, perseverance, patience, determination, persistence, resilience, dedication, self confidence, confidence building, self esteem, self-efficacy and positive attitude (McClelland, 1987:233; Henry et al, 2003:35).
18. Strategic planning. This includes strategy development, planning, business plan development, organizational control, organizing, strategic awareness, goal orientation and plan implementation (Vesselov, 2002:19).
19. Supplier management. This includes purchasing, inventory, stock control, cost analysis, value chain and supplier management (Klofsten & Spaeth, 2004:10).
20. Technical ability. This includes vocational training, industry-specific knowledge, product-specific knowledge on how to construct product or service, knowledge of industry standards and practices (Nasser et al, 2003:400; Nafukho, 1998:102; Kodithuwakhu & Rosa, 2002:437; LeBrasseur et al, 2003:315).

From these categories and the literature reviewed above the following propositions and sub propositions were developed propositions about the link between performance and the training of skills:

Proposition A1: Successful SMEs are less likely to have been trained in technical skills than less successful SMEs.

Propositions A2: Successful SMEs are less likely to have been trained in the following personal skills than less successful SMEs:

- Motivation skills
- Life skills

- Literacy and numeracy skills
- Communication

Propositions A3: Successful SMEs are less likely to have been trained in the following business skills than less successful SMEs:

- Business systems
- Business linkages
- Computer literacy
- Financial management
- Human resource management
- Legal
- Marketing
- Operations management
- Research and development
- Strategy and business planning
- Supplier management

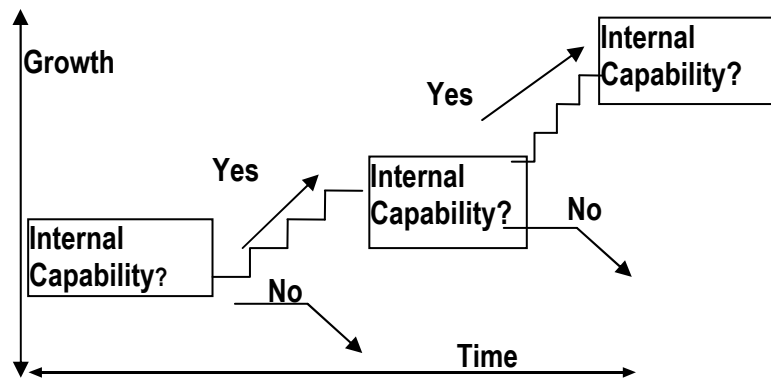
Propositions A4: Successful SMEs are less likely to have been trained in the following entrepreneurial skills than less successful SMEs:

- Opportunity identification, creativity and innovation
- Risk taking
- Role models
- Securing and controlling resources

4.7 Conclusion

This chapter illustrates that the entrepreneurial process begins with a prospective entrepreneur perceiving an opportunity, marshalling the required resources and building a team to realise the vision (McCline et al, 2000:83). How they integrate those elements in relation to competitors in a dynamic environment determines how successful the organisation will become (Thornhill & Amit, 2003:497). As illustrated in figure 4.1 over time, firms succeed or fail as a function of their ability to deploy limited resources in competitive conditions to create and capture value in the marketplace (MacMahon & Murphy 1999:36).

Figure 4.1: Venture growth and internal capabilities model



Source: MacMahon & Murphy (1999:36)

The venture success will be improved if the entrepreneur gains knowledge and acquires the ability needed to steer the venture forward through all the stages of the entrepreneurship process (Gartner et al, 1999:215; Markman & Baron, 2003:296).

The reviewing of training models by van Vuuren & Nieman (1999), Pretorius (2001), Pretorius et al (2005) and the studies by Antonites (2003) and Botha (2006) highlighted which of the identified skills were trainable and the type of training SMEs are believed to need to be able to gain the skills required to function in all areas of the entrepreneurial activity over time (Fernald et al, 1999:310; Nieman, 2003:7). With this list of assignable skills the chapter clustered the skills identified in the literature into 20 skills categories that will be tested in the empirical study.

This chapter also formulated propositions linking training and the key skills. The propositions posit that successful SMEs are more likely to have been trained than the less successful SMEs. From these propositions the study will further investigate whether these SMEs had been trained in the said skills, and links this with the extended educational model. The answer will imply whether training does have a significant impact on entrepreneurial performance.