

## Entrepreneurship education and training at the Further Education and Training (FET) level in South Africa

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*We assessed the levels of entrepreneurship education and training at the Further Education and Training (FET) level in a South African context. We are of the opinion that entrepreneurship education and training (of necessity) must fulfill a primary role in preparing our youth for their future. Evidence from elsewhere, in particular industrialised countries, indicates that entrepreneurship education and training at school level play important roles in the contribution to economic growth. Experts in the field of entrepreneurship believe that the contribution of small to medium-sized enterprises (SMEs) to the growth of our country can be much higher if entrepreneurship education is implemented at school levels. Entrepreneurship is now one of the outcomes of Grades R – 12. However, our research clearly showed that various problems in schools hinder the effective implementation of entrepreneurship education, some of which are poorly trained educators and lack of adequate resources. Better entrepreneurship education could make a significant contribution to job creation and ultimately to poverty alleviation.*

**Keywords:** education; entrepreneurship; high schools; training

### Background to the study

The key to the success of establishing a culture of entrepreneurship in South Africa is education, which depends on all the stakeholders, including state, educators, and learners themselves. Apart from the educational impact of the home, the school can be regarded as the place where the most (holistic) profound impact can be brought about in the development of the youth. One of South Africa's greatest limitations to economic development can be ascribed to its lack of entrepreneurs. The ratio of entrepreneurs to workers in South Africa is approximately 1 to 52, while the ratio in most developed countries is approximately 1 to 10 (Friedrich & Visser, 2005; Acs, Arenius, Hay & Minniti, 2004; Gouws, 2002). Furthermore, Shay and Wood (2004) present disturbing findings with their research, which shows that young South Africans believe significantly less in themselves as business starters, compared with similar developing countries such as Argentina, India, Brazil, and Mexico.

Economic growth in industrialised as well as developing countries remains a central issue and, as such, particular interest is focused on the role of entrepreneurship to achieve and maintain open and modern economies (Wennekers & Thurik 1999; Garavan & O'Cinneide 1994). Yet, recent references to the low incidence of entrepreneurship in South Africa raise the question whether this low prevalence is not perhaps symptomatic of our education system? Lewis (2002) argues the opposite when he reports that "70% of high school students are interested in starting their own business,

but 85% reported they were taught little or nothing about how a business works". With South Africa's unemployment rate conservatively estimated at 30%, these figures are bloated when we realise that only 25% of the matriculants annually gain entry into tertiary institutions (Kassiem, 2003), with another 10% finding employment in the formal sector.

This synopsis indeed sketches a bleak picture, yet entrepreneurship development and training is not a new phenomenon. As far back as 1994 a co-ordinated entrepreneurship strategy (through the 2005 Revised National Curriculum for Grades R – 9) was developed and implemented. However, this strategy for Grade 10 was only implemented in 2006, Grade 11 in 2007, and Grade 12 planned for 2008, respectively.

In view of the above, we reflect on the state of entrepreneurship training and curricular aspects of entrepreneurship at FET level. Grades R – 9 have been excluded from this discussion, as entrepreneurship is required to be taught through the 2005 Revised Curriculum.

### **Theoretical approaches to entrepreneurship training**

#### **Entrepreneurship**

Rwigema and Venter (2004) define entrepreneurship as the "process of conceptualising, organizing, launching and — through innovation — nurturing a business opportunity into a potentially high growth venture in a complex, unstable environment". From the above definition at least four key components can be deduced: firstly, it involves a process which is therefore manageable; secondly, it creates value in organisations and the market place where there was nothing before; thirdly, it requires resources uniquely integrated to create the value and, fourthly, it is the outcome of an identified opportunity (Morris & Kuratko, 2001). The degree of entrepreneurship is dependent on three dimensions, namely, innovativeness; risk-taking; and pro-activeness (Morris & Kuratko, 2001).

Lüthje and Frank (2002), Charney and Libecap (2000) and Robinson and Sexton (1994) all put forward that a positive correlation exists between education and business creation. Based on Timmons and Spinelli (2004) and others who are of the opinion that entrepreneurship can be learnt, Kuratko (2003) observes the decision by many tertiary institutions in the United States of America, Europe, East Asia and Latin America to design and implement relevant entrepreneurship teaching programmes.

#### **Entrepreneurship education and training**

Entrepreneurship education can be defined as the purposeful intervention by an educator in the life of the learner to impart entrepreneurial qualities and skills to enable the learner to survive in the world of business. Alberti, Sciascia and Poli (2004) define entrepreneurship education as

the structured formal conveyance of entrepreneurial competencies, which in turn refers to the concepts, skills and mental awareness used by individuals during the process of starting and developing their growth-oriented ventures.

For the purposes of this article and from the model on entrepreneurship education at school level as it stands today, we therefore make the following proposition:

**Proposition:** *Entrepreneurship education and training is an accepted element of the high school curriculum.*

There is general agreement by researchers in the field of entrepreneurship that more emphasis should be placed on entrepreneurship education and training as opposed to business education. Business education has a more limited coverage than entrepreneurship education and training, which include additional topics, such as innovation and risk-taking, for example. The Consortium for Entrepreneurship Education (2004) points out that entrepreneurship education is a life-long learning process and consist of five stages, namely, basics, competency awareness, creative applications, start-up, and growth, as depicted in Figure 1.

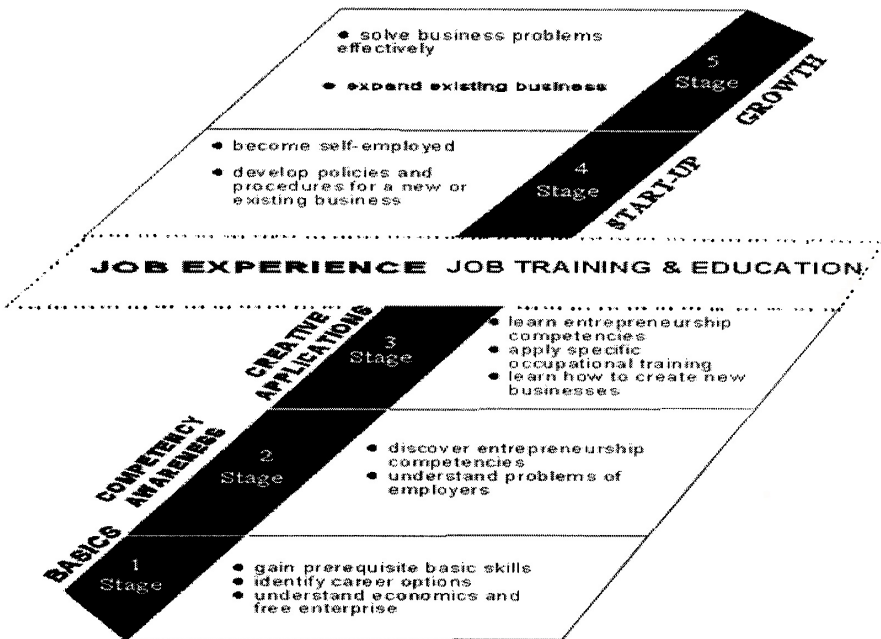


Figure 1 Stages of entrepreneurship training (Consortium for Entrepreneurship Training, 2004)

Ladzani and Van Vuuren (2002), on the other hand, include motivation, entrepreneurial skills and business skills in their entrepreneurship performance training model. However, as Nieman (2000) points out, confusion exists between entrepreneurship and small business training and the terms are used interchangeably (Zeithaml & Rice, 2005). Nieman's view is also supported by Solomon and Fernald (2005) who believe that a small business management course is about starting and operating a business, and engaging in the functional aspects of an existing business; whereas Wilson (2004) states that an entrepreneurship training course is about the creation of a new business venture where the emphasis will be on profitability, growth and exit strategies. According to Ladzani and Van Vuuren (2002), very few programmes are assessed and there is a need for research to be undertaken to assess the content and impact of training programmes. By implication, all business owners may not necessarily be entrepreneurs. In addition, significant numbers of small businesses are started as a means to survive, and are referred to as survivalist entrepreneurs.

Similar problems of introducing entrepreneurship education at school level are experienced at tertiary level. For example, according to Davies (2001), introducing entrepreneurship as a discipline especially in tertiary institutions is problematic due to different mindsets, funding mechanisms and confusion between entrepreneurship training and creation of small business managers. A vast majority of academic departments do not offer entrepreneurship training; instead entrepreneurship is "packaged" as a component of other business programmes. Ladzani and Van Vuuren (2002) state that many training institutions conduct training in only one functional area, even though a broad range of options is available. Another concern is that these institutions offer very little entrepreneurial skills training, which is a disservice to the SME sector they serve. In addition, research output on most of these elements is also very low on SMEs, with very little research (if any) on entrepreneurship. To conclude, the major problem lies therein that research is required to document the training programmes offered and the effectiveness of these programmes.

The objectives of this type of teaching, as succinctly presented by the European Union (2002) is to

... include raising students' awareness of self-employment as a career option (the message being that you can become not only an employee, but also an entrepreneur); promoting the development of personal qualities that are relevant to entrepreneurship, such as creativity, risk-taking and responsibility; and providing the technical and business skills that are needed in order to start a new venture.

Having identified the elements of entrepreneurial education, the Nieman and Van Vuuren model of entrepreneurial performance training (see Table 1) is presented for consideration in the promotion of entrepreneurship at high school level. The model includes three components, namely, motivation; entrepreneurial skills; and business skills (Ladzani & Van Vuuren, 2002).

**Table 1** Content of entrepreneurial performance training (adapted from Ladzani & Van Vuuren, 2002)

Motivation	Entrepreneurial skills	Business skills
<ul style="list-style-type: none"> <li>• Need for achievement</li> <li>• Ability to inspire</li> <li>• Expectations of the higher achiever</li> <li>• Obstacles or blocks</li> <li>• Help</li> <li>• Reactions to success or failure</li> </ul>	<ul style="list-style-type: none"> <li>• Creativity</li> <li>• Innovation</li> <li>• Ability to take risks</li> <li>• Ability to identify opportunities</li> <li>• Ability to have a vision for growth</li> <li>• Interpret successful entrepreneurial role models</li> </ul>	<ul style="list-style-type: none"> <li>• Management/Leadership</li> <li>• Business plans</li> <li>• Financial skills</li> <li>• Marketing skills</li> <li>• Operational skills</li> <li>• Human Resources skills</li> </ul>

It is commonly believed that entrepreneurship education is an absolute imperative that would make a positive contribution to improving the entrepreneurial orientation of people. Wiklund (1999) postulates that entrepreneurial orientation consists of two components, namely, action orientation, which results in actual entrepreneurial behaviour; and mental orientation or way of thinking of the small business manager, which is not necessarily put into action. In addition, Frese (2000) identifies seven characteristics as important to create an entrepreneurial orientation. They are:

- Learning orientation,
- autonomy,
- competitive aggressiveness,
- innovative orientation,
- achievement orientation,
- risk-taking orientation, and
- personal initiative.

From a further perspective Bolton and Thompson (2004) postulate that entrepreneurship education and training activities consist of three categories, namely:

- Entrepreneurship as a subject, covering the areas from economic development to business plan preparation, with a major focus on the entrepreneur;
- entrepreneurship as an activity, with an approach about entrepreneurship, but also for entrepreneurs with the main focus on the preparation of a viable business plan; and
- entrepreneur enabling, which is concerned with the potential of entrepreneurs and how their talent can be identified and enabled.

In view of the above analyses on content, entrepreneurial training must be viewed as a practical application and common sense approach to acquiring the necessary skills to grow the business successfully. The typical components, according to three American training institutions, are illustrated in Table 2.

Table 2 Typical entrepreneurial training components

Southern Utah University	Mi Negocio Training Institute	Louisiana Department of Economic Development
Entrepreneurial training	Evening entrepreneurial training course	Small emerging business development programme
Provides a practical hands-on and common sense approach to getting the skills you need to grow successful business ventures 12-week course	Provides the small business owner with affordable training. Aimed at start-up, emerging or expanding phase businesses 12-week programme	To provide a broad base of assistance to small and emerging businesses  10-week programme
E-Business	Secrets to becoming a successful small business owner	Entrepreneurial characteristics and business planning process overview
Business planning and research	Legal structure, taxes and organisational matters	Automating your business
Management and legal structure	Key marketing decisions and research	Market identification and costs of acquiring sales
Market analysis	Understanding money and credit	Accounting overview and financial statement analysis
Marketing strategies	Pricing, start-up costs and break-even	Cash flow analysis
Financial planning	Marketing mix and sales/customer service	Business structures and risk
Using financial statements	Marketing calendar/ action plan and internet/E-Commerce	Financing
Cash flow projections	Budgets and projections	Selling
Financing your business	Accurate record-keeping	Human resources
The deal-making process	Marketing materials and tools	Presentation and graduation
Managing future growth	Business Plan completion workshop and insurance overview	
Developing an exit strategy	Borrowing money and business plan review and lenders panel	

In stark contrast to the typical components contained in the school systems (as presented in Table 2), our accumulation of knowledge about entrepreneurship education offered by schools in the South African context presented major differences from one school to another, for example, the

primary focus of the teacher-training curricula is to

- teach basic entrepreneurial skills
- ensure that learners understand the real world of work and entrepreneurship
- provide opportunities to learn about the importance of entrepreneurship to the economic system through classroom and practical experience
- launch an in-school business
- explore learners' entrepreneurial qualities, and
- teach education economically

According to Alberti *et al.* (2004), for effective entrepreneurship education there should be a relationship between the goals of the entrepreneurship programme, the audiences to which the programme is delivered, the contents of the entrepreneurship courses or modules, the method of delivery or pedagogy, and finally the assessment that will be used. Four of the five issues have been addressed, but not assessment. Traditionally in schools, assessment centres around tests, individual and group project work with a final examination at the end of the year. Research by Cooper, Bottomley and Gordon (2004) and Gibb (2002) indicates that the above methods of assessment are by far the commonest means of assessment.

Notwithstanding the findings above of entrepreneurial training that promotes skills acquisition, autonomy, innovation, achievement orientation, risk-taking and personal initiative, our findings restated our assumptions that learners in a South African context were hardly motivated to be creators of jobs. Instead, they are taught to rather seek employment, as it would ensure a stable income for the family.

### **Research methodology**

The National Department of Education is responsible for developing education policy but each provincial education department is responsible for its implementation. From Grades 1 to 11 each school is responsible for assessment; however, as a quality check Grade 12 learners in each province write the provincial examination and the papers are graded by a special select group of assessors.

In order to understand and broaden our knowledge base of the extent to which entrepreneurship is being implemented in school curricula, the respective Departments of Education in the nine provinces were contacted for assistance. From discussions with the departments it was then decided to draw a sample of dominant/leading schools<sup>1</sup> in each province representative of both urban and rural schools.

The rationale for using the dominant/leading approach (i.e. method and direction) was based on the assertion that the dominant/leading schools are the institutions most likely to offer entrepreneurship programmes.

Once the procedure of identifying dominant/leading schools in each of the provinces was completed, schools were contacted telephonically and the rationale for the research explained. The questionnaire was faxed to respondents who were requested to prepare for a telephonic interview.

For the purposes of eliciting as much useful information as possible by means of telephonic interviews, the research questions were broadly divided into two categories. For example, research questions of a primary nature focused on the state of entrepreneurship education and training in South African secondary schools with particular reference to the FET, and research questions of a secondary research nature assessed the primary contributing factors for the state of entrepreneurship education and training at the FET level, as well as the strategies that can be followed to improve the situation.

### Results of the study

The results are shown in Table 3. Column 2 shows the number of urban and rural schools that were contacted, whilst column 3 gives an indication of the schools in each sector that were offering entrepreneurship, and column 4 indicates the schools where no entrepreneurship was offered.

**Table 3** Sample of schools offering entrepreneurship training programmes

1	Entrepreneurship training programmes		
	2	3	4
	Rural (R)/Urban (U)	Offered	Not offered
Eastern Province	2R	0	2
	6U	3	3
Gauteng (no rural areas)	2U	1	1
Kwazulu Natal	2R	0	2
	2U	2	0
Mpumalanga	4R	0	4
	2U	0	2
Northern Cape	2R	0	2
	2U	0	2
Limpopo	1R	0	1
	2U	0	2
North West	1R	1	0
	3U	3	0
Free State	2R	2	0
	2U	2	0
Western Cape	2R	0	2
	2U	2	0
Total interviewed	39	16	23

Based on the procedure described above, an assessment of 39 dominant/leading schools was made in the nine provinces. Rural schools represented 41% and urban schools 59% of the sample.



Our suspicion at the lack of entrepreneurial training in high schools was confirmed by the finding that in almost 60% of the schools no entrepreneurship training programmes were offered.

The directives for Economic and Management Sciences (with four Learning Outcomes — one of which is Entrepreneurial Knowledge and Skills) stipulate that entrepreneurship-training programmes are compulsory up to Grade 9 in all provinces. However, two-thirds of the schools contacted in our research project had not introduced this important element of the Economic and Management Sciences curriculum! Based on our question whether this strategy provided the desired results, schools offered the following reasons for non-compliance:

- Schools are still following the curriculum of 1994;
- they do not have sufficient human and physical resources;
- teachers are not equipped, nor trained to teach the subjects of Economic and Management Sciences, and Entrepreneurship;
- schools receive little support from government;
- the syllabus on entrepreneurship is not available and/or the schools have very little information on what is required;
- entrepreneurship is not considered a priority (laboratories and libraries are considered more important);
- meaningful relationships with businesses are non-existent (i.e. the absence of a strong network for support);
- businesses (i.e. commerce and industry) prefer supporting Mathematics and Science programmes; and
- in rural areas distance poses a major problem, in that it presents challenges to service providers with regard to travelling to and from the school and to the office.

In terms of assessment, the common means of assessment were tests, individual, and group project work. In at least 80% of the schools surveyed where entrepreneurship was offered, it also culminated in a school fund-raising event, namely, the annual entrepreneurship school day. Students are provided with an opportunity to exhibit the skills they have acquired during the year. The female learners exhibit, for example, their baking, knitting or crochet skills whilst the male learners have an opportunity to exhibit their woodworking, mechanical, electrical, or electronic skills.

Despite the fact that the learners were acquiring valuable skills, entrepreneurship education was only offered at a small number of schools. It is therefore clear that the current strategy is not working, and an alternative sustainable strategy must be found.

### **Findings of the study**

In terms of the findings from the study, the research team proceeded to group these findings into three specific categories, namely, (i) unmet training needs, (ii) opportunity ranking in terms of impact, size and strategic fit, and (iii) requirements for capturing the most attractive training opportunities. These findings are outlined here:

(i) Unmet training needs

We identified gaps in terms of limited geographic coverage by current programmes. These unmet training needs were based on our findings from the literature review, as well as information gained during the interviews with leading service providers, e.g. in a survey by Friedrich, Visser, Isaacs, May, Stoltz, Brijlal and Solomon (2005) it was found that 60% of high schools in South Africa do not present any entrepreneurship training programmes, despite the directives that “entrepreneurship training programmes are compulsory up to Grade 9 in all provinces” (Friedrich *et al.*, 2005). Furthermore, only 19% of rural high schools and 57% of urban high schools offer some form of entrepreneurship training programmes. The unmet training needs of high schools, as identified by Friedrich *et al.*, (2005) pertain to a lack of exposure to entrepreneurial skills and motivational skills, as also espoused by Ladzani and Van Vuuren (2002) and Hytti (2002). However, on the positive side, we could also verify a number of non-government organisations (NGOs) that specialise in entrepreneurship education and training at school level. In the latter instance, the three foremost non-government organisations were identified and assessed, namely, the Foundation for Business and Development (FEBDEV), Education with Enterprise Trust (EWET), and the South African Institute of Entrepreneurship (SAIE). All three NGOs use training material developed by and for the South African business environment (Friedrich *et al.*, 2005).

(ii) Opportunity ranking in terms of impact, size and strategic fit

Northern Cape, Eastern Cape, Limpopo, and Mpumalanga were identified as the provinces most in need of training. This assessment did not taken into account whether opportunities existed in those provinces. However, if there are opportunities, true entrepreneurs will, through innovative and creative means, find profitable opportunities. In all these provinces some form of mining activities take place and should provide probable business opportunities in the form of secondary and tertiary activities, which can support the primary activities.

(iii) Requirements for capturing the most attractive training opportunities

Three critical areas were identified as prerequisites for implementing training programmes, namely, development of infrastructure, provision of suitable and appropriate training material, and the need for funding. It was evident that suitably qualified educators would most certainly make a positive contribution to the development of the entrepreneurial spirit leading to capturing of opportunities.

## Recommendations

As indicated previously, entrepreneurship education at school level does not receive a high priority in the South African context. In this regard, Kiggundu (2002) suggests that entrepreneurship education should become a “mainstream” activity in the education systems of African countries.

In the context of teacher training programmes, in most entrepreneurship programmes there are two focus points, namely, the *entrepreneur as a person* and the *entrepreneurial process*. These themes should be taken as a guideline when compiling a curriculum for teacher training. In order for learners to benefit from entrepreneurship education in the curriculum, teachers should be trained to teach both these themes.

According to Gouws (2002), the following aspects should be included under the theme *entrepreneur as a person*:

- Entrepreneurial qualities, e.g. achievement motivation; creativity; decision making; initiative; innovation; locus of control; and risk taking;
- entrepreneurial skills, e.g. strategy formulation; leadership; planning and time management and financial concepts; communication and negotiation skills; and
- self-knowledge.

Under the theme *entrepreneurial process*, the following aspects should be covered:

- Economic education, e.g. unemployment; economic growth; tax; personal financial management; productivity; and industry knowledge;
- business idea, e.g. searching for an idea; creativity; and innovation;
- compiling a business plan; and
- starting a business, e.g. market day or flea markets.

Kiggundu’s postulation (2002) of “mainstreaming” entrepreneurship education is further supported by the interactive nature of the Hytti model (as shown in Figure 2) in which the different roles assigned to entrepreneurship education are summarised.

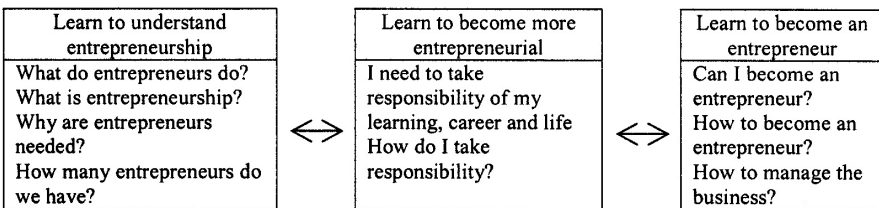


Figure 2 Hytti model of entrepreneurship education (Hytti, 2002)

In essence, each of these three categories has the purpose of identifying and monitoring progress as the student moves from becoming familiar with the concept of entrepreneurship to developing a level of maturity that will enable the student to start an enterprise to a stage where the student/prospective entrepreneur possesses most of the elements required for business success.

The following is a list of three prioritised training opportunities and two recommendations (i.e. strategies, tactics, scenarios) are offered in this regard:

### Prioritised training opportunities

1. Implementing “Training-the-trainer programmes” for educators in seven provinces<sup>2</sup> in South Africa. The rationale for this recommendation is based on our findings and observations that:
  - schools teachers are ill-equipped for the role of mentor, advisor and lead promoter of entrepreneurship programmes at schools;
  - feedback from and interviews with the Departments of Education of all provinces support the notion for a concentrated and concerted “roll-out” of such types of interventions; and
  - cost-benefit analysis supports the impact of programmes of this nature. Training the educators has a multiplier effect at the point of delivery, for example, if 3 educators are responsible for training 25 people, these 25 people can be divided into groups of 3, providing 8 groups, 8 groups train 25 people each, provide an additional 200 (8 × 25) trained people. Training 25 people is far more cost effective than attempting to train learners with, for example, 3 educators. When learners are trained to train, the multiplier effect takes place. Monitoring is essential to ensure that quality is not jeopardised in the process.
2. Training learners in the rural schools of four provinces, namely, Northern Cape, Eastern Cape, Limpopo, and Mpumalanga. The total number of learners in these provinces is 1 million (i.e. the 2001 figures multiplied by the percentages indicated by the Department of Education). If it is assumed that 25% of the learners are interested in Entrepreneurship, the total number of learners that could be trained is 250 000. If 25 learners can be trained at a time, it will provide 200 educators with 40 groups each to train. If the length of the training programme is one month’s concentrated training, it will take each trainer approximately three years to train the 40 groups.
3. Based on the finding from the interviews with leading service providers, as well as the feedback from schools, it is clear that there is a profound need for entrepreneurship training and intervention methods in rural areas.

The strategy and tactics required to capture learning opportunities (namely, that the successful implementation of any programme) are based on the fact that the “entering points” need to be channelled through the Educational Management Development Centres (EMDCs) in the respective provincial Departments of Education. Two recommendations are offered (or, can be made) in this regard:

- Recommendation for Scenario 1: “Rolling-out” in one province. Congregating resources into one province presents opportunities for launching and implementing programmes at levels, which can be perceived as making a profound impact. For example, the impact is highly visible, the programmes are localised (and by the same token mistakes are localised). However, most importantly, this form of implementation creates the ideal forum for impact assessment and establishing a track record.

- Recommendation for Scenario 2: Entering provinces simultaneously. For the latter endeavour to be successful, the only qualifications (provisos), are, *inter alia*, conditional upon sufficient funding, infrastructural needs that have to be met and appropriately trained teachers and resource persons (in entrepreneurship delivery programmes).

### Strategies to accomplish recommendations

Approximately 60 service providers were identified and assessed. The following criteria were used as the basis for assessment, namely, capacity to deliver programmes on a national basis; primary focus areas; content of the programme; target group; capacity of delivery; contact time; method of presenting the material; method of assessment; accreditation of the programmes or the organization; origin of the programme (local or international); qualifications of the trainer; screening of trainees; and unique characteristics of the programme.

In the final analysis approximately six organizations were identified as leading service providers, with one national service provider focusing on the schools with support from provincial or local service providers, and one national leading service provider focusing on the youth with the support of provincial and local service providers.

The primary reason for one national service provider in each category is to ensure that quality programmes are designed and training takes place and to serve as the total quality-control organization.

Furthermore, the notion that entrepreneurship as a process should start in primary schools and continue in secondary schools is accepted by the Department of Education. This should be followed through further at a tertiary level, where the focus should not only be teaching “about” entrepreneurship but also teaching “for” entrepreneurship (Levie 1999).

### Summary

It would appear that teacher training institutions in South Africa have not yet responded to the apparent demand and necessity for entrepreneurship education. Despite the problem of unemployment and inclusion of entrepreneurship in Curriculum 2005, no trace of an integrated educational strategy for Entrepreneurship Education could be found.

Given South Africa’s unemployment problem, the role of effective entrepreneurship education is seen to be indispensable in the future economic prosperity of the country. One important way this can be done is to train teachers to teach learners entrepreneurial skills and through this establish a culture of entrepreneurship at school level.

It is a fact that education alone cannot completely prepare entrepreneurs to be successful business owners, but education increases the chances of success. Entrepreneurship education reflects the concern that young people should possess the skills, knowledge and attitudes to create their own future, manage their own affairs, and solve their own problems. This includes:

- Education **for** enterprise (i.e. developing business-related skills);

- education **about** enterprise (i.e. knowledge and understanding); and
- education **through** enterprise (i.e. learning to be enterprising).

## Conclusions

The researchers concluded that:

- There is general consensus at national and provincial levels of a policy commitment to promote entrepreneurship education at school level. However, between policy and implementation a great void exists, manifested by inertia and unwillingness to deal with change proactively;
- entrepreneurship education and training can make a positive contribution to job creation and therefore to poverty alleviation — encouraging the entrepreneurial spirit is a key to creating jobs and improving competitiveness and economic growth throughout market economies;
- curriculum development, together with entrepreneurship education, will improve the quality of teaching entrepreneurship at FET level;
- government, schools, and service providers will have to work together to increase the awareness and changing perceptions of entrepreneurship as an alternative career. Working together would also ensure that duplication is either limited or totally eliminated. It would further help in utilising limited resources optimally;
- particular emphasis should be placed on entrepreneurship education in rural areas, as the unemployment is normally higher in these areas;
- educators should use good role models as it will enhance the chances of learners following in their footsteps;
- entrepreneurship education and training needs to be localized, i.e. researching the local environment and circumstances before implementing another general programme which will not in any way contribute to skills improvement and therefore to small and medium enterprise development and ultimately job creation.

From our findings and the discussion above, we can now revisit our proposition, namely:

*Entrepreneurship education and training is an accepted element of the high school curriculum.*

Nowhere in our research could we find evidence to support our proposition. However, from the literature it is evident that entrepreneurship education is increasing in importance and that it can be taught and it can contribute to job creation and make an impact on poverty alleviation (Timmons & Spinelli, 2004; Kuratko, 2003; Lüthje & Frank, 2002; Charney & Libecap, 2000; Robinson & Sexton 1994).

If, in terms of Porter's view (1990) "entrepreneurship is at the heart of national advantage", then a radical rethinking on how this can be brought about in the South African context is needed. The best place to create an environment to nurture entrepreneurship is at school level, which has thus far received only sporadic acknowledgement and recognition.

In conclusion, as argued by Friedrich and Visser (2005), the major focus areas for entrepreneurship education at schools should contain any number of the following elements:

1. The point of departure for enterprise education and training is at the school and at tertiary levels. It is at these levels where the love for, and interest in, enterprise is cultivated.
2. Closely associated with the above is the teacher/academic as the medium of creating and nurturing the interest in enterprise education.
3. Involving business in the provision of education, training, role models and financial support is a vital component.
4. Networking between all stakeholders and participants in the system of educational service delivery.
5. Collaborative affiliation made up of provincial departments of education, tertiary institutions, private groups, financial institutions, co-operation with entrepreneurs to give guidance, expertise and research support.
6. Establishing contact on a broader basis by seeking international affiliation with like-minded organisations.

### Notes

1. A dominant/leading school is defined in terms of having the highest pass rate at Grade 12 and/or presenting entrepreneurship programmes and/or being involved in outreach programmes.
2. Due to their relatively strong resource bases the two provinces, Gauteng and the Western Cape, were excluded.

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