

The impact of previous knowledge and experience on the entrepreneurial attitudes of Grade 12 learners

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According to the 2003 edition of the Global Entrepreneurship Monitor (a report which examines the relation of a country's economic growth to the level of entrepreneurial activity), South Africa has a poorly developed entrepreneurial culture, characterized by a shortage of entrepreneurs and negative attitudes towards pursuing entrepreneurial careers. Against the background of the country's worsening unemployment problem and the need for economic development, a stronger entrepreneurial culture, that produces more entrepreneurs, businesses and employment opportunities to contribute to economic growth than at present, is critical. Entrepreneurship education can contribute to the development of a stronger entrepreneurial culture. In this regard the outcome of the learning area, Economic and Management Sciences (EMS), as part of the Revised National Curriculum Statement (Grades R–9) requiring that the learner be able to demonstrate entrepreneurial knowledge, skills and attitudes should support the development of a stronger entrepreneurial culture. This research examined the impact of relevant previous knowledge and experience of Grade 12 learners on their entrepreneurial attitudes. Although these learners had not been exposed to Curriculum 2005, their training in commercial subjects as well as previous business-related experience appear to have created a positive attitude towards entrepreneurship, as 65% of the respondents indicated that they would like to start their own business one day.

Introduction

Given South Africa's high poverty and unemployment rates, skewed income distribution and potential high contribution that effective entrepreneurship can make towards employment and economic growth, it is vital to determine how entrepreneurship can be effectively encouraged. The important question is: how can this critical input be optimally developed to secure the maximum benefits to the South African economy?

Presently the development of entrepreneurship in South Africa experiences a number of problems. Similar to the situation in many developing countries, South Africa has a growing number of people who start businesses not because they have found an appropriate niche in the market, but because of mere necessity. Driver, Wood, Segal and Herrington (2001:11) referred to this as necessity entrepreneurship and contrasted it to opportunity entrepreneurship, where people start business ventures in reaction to opportunities which they have perceived in the market. Often these necessity entrepreneurs do not have the essential business experience, skills or resources to equip them for even an informal sector venture, and they end up with an income that is below the poverty level, as is the case with at least 45% of self-employed people in South Africa (Bhorat & Leibbrandt, 1998:28). According to the report of the Global Entrepreneurship Monitor (GEM) (Orford, Wood, Fischer, Herrington & Segal, 2003:4), South Africa has a lower total entrepreneurship activity (TEA) rate than the average rate for developing countries, particularly with respect to opportunity entrepreneurship, startups and new firms. Different countries have different attitudes regarding entrepreneurship (Orford *et al.*, 2003:10). However, the establishment of an entrepreneurial culture and entrepreneurial education is regarded as a possible measure to encourage entrepreneurship (O'Neill & De Coning, 1994:20). There seems to be an important link between business success and education, more so through education that is always practically related to business. Education and training enhance the reasoning powers of individuals and impart particular skills. These are likely to increase the general responsiveness of individuals to any given set of entrepreneurial opportunities, and thereby to improve their performance. Self-employed persons with secondary education are more likely to have earnings above the poverty lines (Bhorat & Leibbrandt, 1998:40). The GEM 2002 showed a significant relationship between the level of education of business people and the survival rate of their businesses (Foxcroft, Wood, Kew, Herrington & Segal, 2002:22). The levels of experience and education of the entrepreneurs also seem to have an

impact on the number of jobs they create, indicating that the more educated entrepreneurs have a greater capacity to initiate and expand as well as manage more viable businesses, and in the process create more employment opportunities than their less educated or inexperienced counterparts (Foxcroft *et al.*, 2002:22).

The research problem addressed in this study was whether business related subjects and relevant previous experience impact on the entrepreneurial attitudes of a selected group of Grade 12 learners in a specific South African region.

The research objective of this study was to determine the impact of relevant previous knowledge and experience on the entrepreneurial attitudes of Grade 12 learners in the Stellenbosch region. The goal was to determine whether business related knowledge can positively influence entrepreneurial attitudes, particularly among the youth, and thereby contribute towards a stronger entrepreneurial culture. In order to address this objective, a literature review of entrepreneurship education is firstly presented and this is followed by the research methodology, research findings and conclusions, recommendations, caveats, and suggestions for further research.

Definition of concepts

Traditionally there has not been consensus on a universal definition of entrepreneurship (Nieman, Hough & Nieuwenhuizen, 2003:4). However, entrepreneurship can be defined as the creation of a new business in conditions of risk and uncertainty in order to realise a profit (Scarborough & Zimmerer, 2003:3). This basic definition implies that the entrepreneur will possess such characteristics as the desire to be his/her own boss, creativity, innovativeness, perseverance, the desire to succeed, and a positive attitude (Nieman *et al.*, :15-17). There may, however, be different degrees of entrepreneurship, each associated with a specific risk–return pay off relative to the risk propensities of individuals (Kaplan, 2003:5; Burch, 1986:4).

In addition entrepreneurial attitudes can be seen as an individual's orientation towards future involvement in value-adding activities relating to self-employment in a small business.

Finally, entrepreneurial culture can be defined as societal values, beliefs, philosophies, and actions that encourage and enable members to creatively take calculated risks and play a proactive role in shaping their future (O'Neill & De Coning, 1994:12). An entrepreneurial culture can also be seen as "a moving away from a 'culture of dependency' to one of 'self-reliance'" (Peters, 2001:58).

Literature review

The need for an entrepreneurial culture

Developed countries tend to have strong entrepreneurial cultures, characterized by environments conducive to business activity where the majority of businesses are small or medium-sized (Orford *et al.*, 2003). South Africa has a poorly developed entrepreneurial culture relative to countries with similar levels of the Gross Domestic Product (GDP) (Driver *et al.*, 2001:3). In order to help address the unemployment problem in the country and contribute to sustainable economic development, it is important to develop a strong entrepreneurial culture (Nieman *et al.*, 2003:28). The development of an entrepreneurial culture is a long-term process where various stakeholders such as government, the private sector, communities, educators and parents have to entrench and develop positive attitudes towards entrepreneurship (Gouws, 2002:41). Positive attitudes towards entrepreneurship would, however, only be the beginning of the empowerment process as the long-term ideal would be that an increasing number of individuals would translate their positive attitudes into entrepreneurial activities by starting and running their own businesses.

Education and the development of an entrepreneurial culture

The development of an entrepreneurial culture is a protracted process involving numerous role players. Education is an important contributor to the development of an entrepreneurial culture. Gouws (2002:41) stated succinctly: "the key to success in establishing a culture of entrepreneurship in South Africa is education". Various businesses, institutions and other stakeholders, including the state, teachers, parents and the learners themselves have a role to play in this process (Gouws, 2002:41). In Curriculum 2005, entrepreneurship is part of the learning area Economic and Management Sciences. The vision here is that entrepreneurship education should become an integral part of the lives of every child, teacher and adult (Gouws, 2002:41). The Revised National Curriculum Statement (RNCS) Grades (R–9) went further to specify that entrepreneurial knowledge and skills should be one of the four outcomes in EMS (Department of Education, 2001:27). The emphasis on the development of an entrepreneurial culture among the youth is in line with initiatives in the United States and Japan (North, 2002:24).

The RNCS with the developing of entrepreneurial skills and knowledge as a stated outcome in EMS (Department of Education, 2001:27) should facilitate the assessment of entrepreneurial activities of learners as they should be able to demonstrate entrepreneurial knowledge, skills and attitudes. Its outcomes are therefore based on certain specific criteria relevant to business skills rather than purely on examinations (Du Toit, 1997:125). Although entrepreneurship education can play an important role in the development of an entrepreneurial culture, successful entrepreneurship education will require a unique hands-on approach for which the teachers will need special training (Gouws, 1997:147).

Expectations of entrepreneurship education

According to Jack and Anderson (1999:115) governments expect entrepreneurship education to contribute to job creation, economic growth, skill enhancement and the development of an entrepreneurial culture. Businesses expect entrepreneurship education to establish an understanding of basic business issues, creative work attitudes and an entrepreneurial approach among learners (Jack & Anderson, 1999:112). Learners expect entrepreneurship education to assist them in their quest to start their own businesses one day and to develop skills that will help them to find work in the large business sector as well (Jack & Anderson, 1999:116). Practising entrepreneurs expect entrepreneurship education to help them solve the unique problems in their businesses (Young, 1997:218). Practising entrepreneurs may, however, have negative attitudes towards formal entrepreneurship education, more so if it is theoretically based (Gorman, Hanlon, & King, 1997:66). Training institutions such as service organizations, universities and schools often expect the offering of entrepreneurship

education to provide them with enhanced status and a higher profile with regard to community commitment (Roebuck & Brawley, 1996:125-128). The public expects institutions to contribute towards job creation and the formation of new businesses through entrepreneurship education (Laukkanen, 2000:25-47).

The RNCS of the Department of Education in South Africa has seven critical outcomes and five developmental outcomes which have been adopted by the South African Qualifications Authority (SAQA). With regard to entrepreneurship, SAQA proposed an outcome with the specific intention of enabling learners to identify and engage in entrepreneurial opportunities (North, 2002:2b; Department of Education, 2001:11). The learning area Economic and Management Sciences incorporated into the RNCS stipulated the outcome that each learner should demonstrate entrepreneurial knowledge, skills, and attitudes (Department of Education, 2001:27). Should this outcome be realized, an important contribution could be made to the development of an entrepreneurial culture.

Entrepreneurship education and entrepreneurial culture

Driver, Wood, Segal & Herrington (2001:4) in the South African GEM stated that education and training was the most important factor that prohibited the growth of entrepreneurship capacity in South Africa. Although entrepreneurship was part of the overall developmental outcomes of Curriculum 2005 and the RNCS, Driver *et al.* (2001:S2) claimed that the teaching of entrepreneurial skills was outside the capabilities of most teachers and that the building of an entrepreneurial culture would be an enormous challenge. In this regard Gouws (1997:143) stressed that teachers will need to be trained effectively to introduce Economic Education or Entrepreneurship as part of the formal school curriculum which was to come into effect from 1998. She warned, however, that care should be taken not to regard the teaching and promotion of entrepreneurship as the sole responsibility of education at institutions (Gouws, 1997:148). Accordingly, a holistic approach should be taken to foster an entrepreneurial culture in a society. Further, the educational system should be supported by economic and political institutions "to inculcate the entrepreneurial culture in society and to ensure the facilitation and actual establishment of enterprises" (Nieuwenhuizen & Kroon, 2002:157).

The process of entrepreneurship education can be quite complex, requiring a distribution between formal and informal modes of delivery and certain unique approaches. (Hynes, 1996:11). These can include an interdisciplinary approach (Gorman *et al.*, 1997:71); team work (Laukkanen, 2000); experience-based learning (Kent, 1990:22); activity-based (hands-on), goal orientated and achievement-orientated approaches (Rabbior, 1990:55-65); launching of learners' businesses (Anderson, Kirkwood & Jack, 1998) and mentoring (Graham & O'Neill, 1998).

Although Curriculum 2005 has the long-term objective of creating entrepreneurial awareness among all learners, the Grade 12 learners used in this study had not been exposed to (the official introduction of) Curriculum 2005 in their secondary education. The RNCS marked an important practical shift with regard to entrepreneurship as it is now prominently added as a separate outcome in EMS (Department of Education, 2001:27). The full impact of the RNCS will, however, take some time to establish itself as the RNCS was implemented in the Foundation Phase (Grades R–3) in 2004; the Intermediate Phase (Grades 4–6) in 2005; Grade 7 in 2006; Grade 8 in 2007 and Grade 9 in 2008. The FETC qualification will replace the Senior Certificate and will be introduced in 2006 for Grade 10. (Curriculum Issues Bulletin, 2005:1). The current Grade 10–12s will still do the Senior Certificate syllabus. Only two of the eight schools surveyed in this study offered entrepreneurship as a non-examinable subject. With this limitation in mind, the empirical research, discussed in the next section, focused on the potential impact previous education in commercial subjects and previous experience had on the entrepreneurial attitudes of these learners.

Research methodology

Research objective

The research objective was to determine the impact of relevant previous knowledge and experience on the entrepreneurial attitudes of Grade 12 learners in the Stellenbosch region. In this regard previous knowledge referred to training in business-related subjects at secondary level (this does not necessarily include entrepreneurship *per se* as most schools did not then offer it as an examination subject) and previous experience of part-time work in business environments, as well as previous exposure to entrepreneurial role models.

Measuring instrument

Relevant data for the purposes of this study were gathered by means of interviews aided by questionnaires. The subjects of analysis ($n = 370$) were the youth, the logical group from which emerging entrepreneurs in South Africa can be expected. Specifically, this study focused on Grade 12 learners randomly drawn from eight schools within the Stellenbosch geographical area. Of these learning institutions, two schools that accommodated learners from farming areas and located in a rural background were identified, selected and categorized "rural" whilst others (all in urban areas) were categorized "urban". According to the literature the level of education is an important determinant of entrepreneurial capacity since a significant relationship exists between the level of education of business people and the survival of their businesses (Foxcroft *et al.*, 2002:22). In the research design this important variable (level of education) was controlled (although the quality of education which respondents received might still have varied). The purpose of the survey was to determine the learners' perceived and tested business knowledge; formal, informal and experiential business education; business intentions as well as demographic information.

Response rate

Three hundred and seventy learners from eight schools were included in this survey, which represented a response rate of 68.6% of the random sample. As this research group did not in anyway represent the entire youth of South Africa, the findings of this exploratory study cannot be generalized. Hence, the results are to be interpreted cautiously.

Provision for locational and demographical differences

The variables that were included were education and training, experience, age, gender, name of school, ethnic group, and mother tongue. Age and language were included to be able to describe the background of the respondents who were involved in the survey. Gender and ethnic groups were included to trace members of groups that are under-represented in the business world and compare their information with those of the other respondents. On a locational level, rural and urban categories were included.

Statistical analysis

The data from the 370 questionnaires were typed into an ACCESS database and the STATA Statistical Analysis program was used to do statistical analyses. Summary tables will often show the mean of certain responses that were reported on a three- or five-point scale. The calculated mean is not meant to be understood in its statistical sense but only to be used when the null hypothesis is rejected to indicate the direction of the differences between the variables.

Research findings

Profile of the respondents

Ninety-one percent of the participants in the survey were between 17 and 19 years old and the genders were almost equally represented (female 53%; male 47%). With regard to the distribution pertaining to first language, 70% indicated Afrikaans; 13.5% English; 13.5% Xhosa and the remainder indicated other languages. Population indications were: coloured 44.9%; white 40.3%; black 13.2% and no response

1.4%. Of the respondents 24.9% were categorized as rural and 75.1% urban.

Perceived knowledge

More than 65% of the respondents indicated that they wanted to start their own business one day. Only 34% of the respondents believed that they already knew enough about business to be able to start a profitable business whilst the majority reported an insufficient knowledge base for starting a business. A higher percentage of the urban, white group and male believed that they knew enough about business to be able to start a profitable business. When the relationship between the respondents' perceived business knowledge and the reported likelihood to start a business was tested, the null hypothesis was rejected with a confidence level of more than 0.01 ($\chi^2 = 36.24$; $df = 4$; $p = 0.00$). Learners who perceived themselves as having enough knowledge about business seemed therefore more inclined to start a business of their own in the future than their counterparts with less perceived business knowledge.

Tested knowledge

Fifteen questions were asked to test the respondents' knowledge and insight regarding business. There seemed to be a significant relationship between how respondents rated their knowledge and their test results ($\chi^2 = 19.16$; $df = 8$; $p = 0.01$). The respondents' business knowledge as tested did not show any significant association with their intentions to start their own business ($\chi^2 = 8.85$; $df = 8$; $p = 0.36$). Test results may be an indicator of the learners' acquisition of the knowledge of business taught at schools. However this does not necessarily imply that the surveyed learners with better results in tests are more likely to start their business relative to those with poorer test marks. Since a positive relationship was established between perceived business knowledge and business intentions, it could be concluded that their business intentions had a more significant relationship with their perceived business knowledge than with their tested business knowledge. It can be speculatively concluded that in this survey intentions were dependent on perceived rather than actual knowledge.

Education and training

With regard to work experience (past or present) 70.5% of the white respondents, 52.4% of the coloured respondents and 16.3% of the black respondents had experienced a part-time job. O'Neill and Van den Berg (1991:11), in a much earlier survey at two of the schools in the current survey, reported that 66.6% of the white students and 59.4% of the coloured students in their earlier study had had some work experience. This seemed higher, but very similar to the present situation. Traditionally, formal education is perceived as a significant contributor to the development of entrepreneurial skills and attitudes. This is one of the reasons why entrepreneurship has been included in the new South African school curriculum. The literature study suggested that education and training have to date not been perceived as being able to deliver the required results, though in fairness the effect of the new curriculum will take time to evaluate.

Formal education

In the survey, respondents were asked to indicate which commercial subjects they studied (or had studied) in school and the number of years of study. The results are summarised in Table 1.

Accounting was the subject in which the largest percentage of learners had received formal education, but it was often for shorter periods and only 27.1% of them had had more than three years accounting education.

The situation regarding formal business education varied between 0 and 18 subject-years, referring to the sum total of years that the respondents received training in the four subjects at secondary level. Almost 25% of the respondents did not have any education in commercial subjects throughout their high school careers. The opportunity to select specific business subjects differed from school to school.

Table 1 Formal education in commercial subjects

Subject	Number of years of study						Total	Mean
	0	1	2	3	4	5		
Entrepreneurship	308	32	8	6	4	3	361	0.27
	85.3%	8.9%	2.2%	1.7%	1.1%	0.8%	100%	
Economics	258	10	23	45	8	17	361	0.85
	71.5%	2.8%	6.4%	12.5%	2.2%	4.7%	100%	
Business Economics	205	20	22	42	28	44	361	1.45
	56.8%	5.5%	6.1%	11.6%	7.8%	12.2%	100%	
Accounting	182	26	38	17	21	77	361	1.72
	50.4%	7.2%	10.5%	4.7%	5.8%	21.3%	100%	

The formal education received appeared to be associated with gender. A confidence level of more than 0.01 ($\chi^2 = 47.59$; $df = 5$; $p = 0.00$) was found, with the male students having received on average two subject-years more than the female students. Formal education seemed to be associated with the various population groups with a confidence level higher than 0.02 ($\chi^2 = 22.68$; $df = 10$; $p = 0.01$) was found, with the white respondents receiving a mean of 4.63 subject-years business education, the coloured group 4.19 subject-years and the black group 3.49 subject-years. The result appears to reinforce the earlier finding that learners' intentions of starting their own businesses are not significantly related to the level of business education formally acquired thus far from schools. Business education of the rural and urban subgroup did not differ significantly ($\chi^2 = 10.06$; $df = 5$; $p = 0.07$). Furthermore, no significant relationship could be established between formal business education and the respondents' future business intentions ($\chi^2 = 10.80$; $df = 10$; $p = 0.37$).

Table 2 Informal education according to learning activity

Questions	Yes	No	Total
Read articles in magazines or read entrepreneurship books	198 54.9%	163 45.2%	361 100%
Watched TV programmes and videos on business, entrepreneurship	197 54.6%	164 45.4%	361 100%
Participated in informal programmes (e.g. Junior Achievement, Matie Community Service)	80 22.2%	281 77.8%	361 100%
Listened to interviews with entrepreneurs or speeches they made	157 43.5%	204 56.5%	361 100%

Informal education

The next training variable examined in the survey was informal education and training. This entailed learning through reading, listening (live interviews and radio), visual material (TV and video) and informal programmes in which the respondent learners participated. An important feature of informal education is the voluntary nature of it—most of the time students have the option whether they want to participate in it or not. The results summarised in Table 2 clearly show that whilst just over 50% of the respondents informally educated themselves in entrepreneurship by reading books or articles and by watching TV or video programmes on business economic themes, only just over a fifth participated in junior achievement or in community entrepreneurial activities. Informal education also often tended to be of a practical nature and often imparted vital basic skills of entrepreneurship to participants. Unlike the case of formal business education, a significant association seems to exist between informal education and the respondents' future business intentions ($\chi^2 = 19.72$; $df = 8$; $p = 0.01$). This result further strengthens the point that the intentions of young learners to venture into entrepreneurship through

starting their own businesses are more significantly related to their level of informal rather than formal education.

Practical experience

Experiential learning or learning through practical experience is very effective for acquiring entrepreneurial skills (North, 2002:27). A number of potential situations where learners could gain practical experience are shown in Table 3. About two-thirds of the surveyed respondents (68.1%) gained some practical experience of entrepreneurship through being actually engaged in the sale of some products previously and through social networks and involvement in family or friends' businesses. About half (53.6%) of the learners picked up some foundation business skills by working on a part-time basis.

Table 3 Practical learning activities

Questions	Yes	No	Total
Does anybody that you know well (e.g. parent, family member, friend) own a business presently or owned one previously?	244 67.8%	116 32.2%	360 100%
Have you earned any money through services or products you sold previously?	245 68.1%	115 31.9%	360 100%
Do you have a paid part-time job or did you have one previously?	193 53.6%	167 46.4%	360 100%

Forty percent of the learners participated in all three categories of these practical learning opportunities. When the relationship of overall practical learning experience with the respective categories of gender, population groups and rural areas was investigated, the chi-square tests indicated that the null hypotheses could only be rejected in the case of population groups ($\chi^2 = 7.09$; $df = 6$; $p = 0.00$) and locality ($\chi^2 = 9.33$; $df = 3$; $p = 0.03$), not in the case of gender ($\chi^2 = 7.11$; $df = 3$; $p = 0.07$).

Almost 70% of the respondents reported the presence of a business role model in their lives. Since the literature reports a high correlation between business role models and business success, it is encouraging that a large number of the learners had access to this learning opportunity. When previous exposure to entrepreneurial role models was compared according to population groups, it became evident that some of the groups were again at a disadvantage. Only 51% of the black respondents reported that they had role models, whilst 59% of the coloured and 84% of the white learners had the opportunity to learn from their respective role models ($\chi^2 = 29.23$; $df = 2$; $p = 0.00$). Female respondents also seemed to be less likely to have this learning opportunity (61%) than male respondents (74%) ($\chi^2 = 6.76$; $df = 1$; $p = 0.01$). Rural people were less likely to have had practical learning opportunities than the urban respondents ($\chi^2 = 13.78$; $df = 1$; $p = 0.00$) and the chi-square test confirmed all these relationships to be significant as indicated above.

About 68% of the respondents reported that they had earned some money through selling products or services. A large section of the learners had been able to use this learning opportunity. Almost 88% of the white respondents, 60.2% of the coloured respondents and 38.8% of the black respondents reported that they had sold products or services in the past. This analysis according to population groups, indicated that the differences were significant with a confidence level of more than 0.01 ($\chi^2 = 48.85$; $df = 2$; $p = 0.00$). The responses of rural and urban groups did not differ significantly ($\chi^2 = 3.21$; $df = 2$; $p = 0.20$) and neither did the responses of males and females ($\chi^2 = 2.93$; $df = 2$; $p = 0.23$). Practical exposure to and experience of basic entrepreneurship was found to be significantly associated with the population group to which the learners belong. Previously many blacks were deprived of entrepreneurial opportunities in many areas of the formal economy. The opportunities for young learners to earn some money through their engagement in some basic entrepreneurial activities were therefore found to be significantly related to population groups, with whites having a greater earning exposure than other groups. This relationship was not associated with gender or the location of the learners, however. The information about practical learning activities per learner is summarised in Table 4.

Table 4 Summary of respondents' practical learning activities

Number of practical learning activities experienced	Number of respondents	Percentage
0	43	11.9%
1	94	26.1%
2	79	21.9%
3	144	40.0%
Total	360	100%

The number of practical learning activities refer to the number of categories experienced in Table 3

When the respondents' perceived business knowledge was tested for a relationship with each of the various categories of education and training, the null hypotheses were rejected in all three cases — regarding formal education ($\chi^2 = 48.70$; $df = 10$; $p = 0.00$), informal education ($\chi^2 = 52.19$; $df = 8$; $p = 0.00$) and practical experience ($\chi^2 = 17.51$; $df = 6$; $p = 0.01$). These results emphasise the importance of each of these training opportunities in building the participants' confidence regarding their business knowledge.

Previously advantaged individuals in terms of population group were, at the time of the survey, more advantaged regarding access to formal education in business subjects. The black respondents in this study had less access to all three tested practical learning opportunities. Work experience was the one area where their disadvantage was the most pronounced. The categories of informal learning and practical experience are often ignored, partly because they are difficult to replicate if absent. If groups previously excluded from business opportunities are to be supported to bridge the existing gaps, attention should be paid to formal learning, informal learning and practical experience.

Conclusion

This study has shown that the youth from previously disadvantaged backgrounds have on average less business education (3.49 subject-years) than those coming from another background, ranging between 4.63 (white) and 4.19 (coloureds) subject-years. It is therefore no surprise that the surveyed Grade 12 learners apparently coming from an urban background could have more role models of business persons than those from a rural setting. Despite these differences, over two-thirds of the learners had had some exposure to elementary junior entrepreneurship, through engaging in some selling activities and through social networking in friends' or families' businesses.

South Africa needs a thriving entrepreneurial sector if it is to

succeed in meeting the challenges of poverty alleviation, job creation and output generation in a globally competitive environment (Mahadea, 2003:42). Encouragingly, about two-thirds of the surveyed school learners indicated that they want to venture into entrepreneurship by starting their own businesses in the future. However, only 34% thought that they knew enough about businesses to be able to start a venture. This clearly reflects a gap in the education and training arena and implies that a concerted effort should be made to address the youth's needs through an expanded curriculum that integrates small business entrepreneurship into other courses and specialities. Whilst individuals can learn about skills of entrepreneurship from formal school curricula, the critical importance of informal education as a learning approach to practical entrepreneurship should also be emphasized.

Caveats of this exploratory research

These were:

- The geographical limitation of the research; and
- The absence of entirely comparable previous studies.

Further research should investigate inter-regional comparisons of the impact of relevant previous knowledge and experience on the entrepreneurial attitudes of Grade 12 learners and should determine how corrective measures can be developed and implemented to provide practical experience opportunities, especially to black students who previously have been excluded, to the largest extent, from those opportunities. It is also extremely important that an impact assessment research of entrepreneurship education and training should be implemented to help determine choice of programmes.

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