

ASSESSING ENTREPRENEURSHIP EDUCATION PROGRAMMES IN SECONDARY SCHOOLS

BY

NOMONDE MONICA QOTO

**SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF MASTERS IN BUSINESS ADMINISTRATION AT THE NELSON
MANDELA METROPOLITAN UNIVERSITY**

NOVEMBER 2012

SUPERVISOR: DR M. D. M. CULLEN



**Nelson Mandela
Metropolitan
University**

f o r t o m o r r o w

DEPARTMENT OF ACADEMIC ADMINISTRATION

EXAMINATION SECTION

SUMMERSTARND NORTH CAMPUS

PO Box 77000

Nelson Mandela Metropolitan University

Port Elizabeth

6013

Enquiries: Postgraduate Examination Officer

DECLARATION BY CANDIDATE

NAME: NOMONDE MONICA QOTO

STUDENT NUMBER: 9913550

QUALIFICATIONS: MBA

TITLE OF PROJECT: ASSESSING ENTREPRENEURSHIP EDUCATION
PROGRAMMES IN SECONDARY SCHOOLS

DECLARATION

In accordance with Rule G4.6.3, I hereby declare that the above-mentioned treatise is my own work and that it has not previously been submitted for assessment to another University for another qualification.

SIGNATURE:

DATE: 20 November 2012

ACKNOWLEDGEMENTS

The compilation of this research would not have been possible without the support, guidance and encouragement of certain individuals. I wish to express my gratitude to the following individuals:

- ❖ My Lord and Saviour Jesus Christ who has given me the strength to be able to complete this research;
- ❖ Doctor Margaret Cullen, for her patience, support, advice and guidance;
- ❖ My husband, Charles, for his support, encouragement and understanding;
- ❖ My children, Luxolo and Lubabalo, for their support and encouragement;
- ❖ My friends and colleagues for their support and encouragement;
- ❖ The Motherwell secondary schools which participated in the research. A special thanks to commerce educators at these schools who supplied the empirical data, without which the research would not have been completed.

ABSTRACT

The emergence of an entrepreneurial spirit is the most significant economic development in the twenty-first century. Entrepreneurship education was introduced in Grades 10-12 as part of the optional subject Business Studies. There are problems across the country encountered by educators in imparting entrepreneurship skills and knowledge to learners. The integration of entrepreneurial programmes into the education system in secondary schools is a prerequisite to develop the necessary skills to start and run a business successfully. It is the responsibility of the government to ensure that entrepreneurship education is included in the curriculum as a separate subject so as to develop the entrepreneurship skills at secondary school level. The formal employment sector is no longer able to provide jobs for the increasing number of unemployed people. Fewer jobs are available for the economically active population of the South African economy especially the school leavers.

The primary objective of this study is to assess the current entrepreneurship education programmes offered at secondary schools in Grade 10-12 levels in Motherwell. The purpose is to learn from global trends and to improve the current entrepreneurship education programmes. A literature review was done to establish global trends and also South African trends concerning entrepreneurship education programmes. A mixed research approach and cluster sampling was used to select the twelve Motherwell senior secondary schools in the Motherwell township of Port Elizabeth.

The findings of the study were that strategic skills, operational skills, competitions, labour entrepreneurial skills, management skills, creativity and innovation were taught to a limited extent by educators. The practical exposure of learners was deficient because of the limited involvement of local businesses and organisations. Learners were also not encouraged to operate simulated businesses.

The study recommends that the Outcome Based Education, National Curriculum Statement and Curriculum Policy Statement which have been introduced by the Department of Education be followed but adjustments must be made to the

teaching methods to follow the interactive approach required by entrepreneurship. Policy makers should incorporate comprehensive entrepreneurship education programmes from primary school to secondary school to vocational and university and adult education centres. Finally, entrepreneurship education should be offered as an optional separate subject to all learners and involvement of local businesses and organisations should be encouraged.

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION AND SCOPE OF THE STUDY	1
1.1 INTRODUCTION	1
1.2 RESEARCH PROBLEM	2
1.3 IMPORTANCE OF STUDY	3
1.4 RESEARCH OBJECTIVES	9
1.5 METHODOLOGY OF STUDY	10
1.5.1 Research paradigms	10
1.5.2 Justification for the chosen paradigm	11
1.5.3 The sample	12
1.5.4 Measuring instrument	13
1.6 TERMINOLOGY	14
1.7 OUTLINE OF THE STUDY	15
1.8 SUMMARY	16
CHAPTER 2: GLOBAL TRENDS ON ENTREPRENEURSHIP	
EDUCATION	17
2.1 INTRODUCTION	17
2.2 BACKGROUND TO ENTREPRENEURSHIP EDUCATION	19
2.3 ENTREPRENEURSHIP EDUCATION IN CANADA	21
2.3.1 The current state of entrepreneurship education in Canada	22
2.3.2 Entrepreneurship programmes in Canada	22
2.4 ENTREPRENEURSHIP EDUCATION IN CHINA	23
2.4.1 The current state of entrepreneurship education in China	24
2.4.2 Entrepreneurship programmes in China	25
2.5 ENTREPRENEURSHIP EDUCATION IN HONG KONG	26

2.5.1	An Overview of entrepreneurship in Hong Kong	26
2.5.2	The current state of entrepreneurship education in Hong Kong	26
2.6	ENTREPRENEURSHIP EDUCATION IN HUNGARY	30
2.6.1	An overview of entrepreneurship education in Hungary	30
2.6.2	The current state of entrepreneurship education in Hungary	30
2.6.3	Entrepreneurship programmes in Hungary	31
2.7	ENTREPRENEURSHIP EDUCATION IN INDIA	32
2.7.1	An overview of entrepreneurship education in India	32
2.7.2	The current state of entrepreneurship education in India	33
2.7.3	Entrepreneurship programmes in India	34
2.8	ENTREPRENEURSHIP EDUCATION IN NEW ZEALAND	34
2.8.1	Entrepreneurship programmes in New Zealand	35
2.9	ENTREPRENEURSHIP EDUCATION IN USA	36
2.9.1	Overview of entrepreneurship in the USA	36
2.9.2	The current state of entrepreneurship education in the USA	37
2.9.3	Entrepreneurship programmes in USA	39
2.9.4	Potential benefits from entrepreneurship education in USA	41
2.9.5	Challenges facing entrepreneurship education in USA	41
2.10	ENTREPRENEURSHIP EDUCATION IN SOUTH AFRICA	42
2.10.1	An overview of entrepreneurship education in South Africa	42
2.10.2	The development of entrepreneurship education in South Africa	43
2.10.3	The current state of entrepreneurship education in South Africa	45
2.10.4	Entrepreneurship programmes in South Africa	47

2.11 SOUTH AFRICA CAN LEARN FROM GLOBAL TRENDS IN ENTREPRENEURSHIP EDUCATION	48
2.11.1 Lessons to be learnt from Canada	48
2.11.2 Lessons to be learnt from China	49
2.11.3 Lessons to be learnt from Hong Kong	50
2.11.4 Lessons to be learnt from Hungary	50
2.11.5 Lessons to be learnt from India	51
2.11.6 Lessons to be learnt from New Zealand approach	51
2.11.7 Lessons to be learnt from USA	52
2.12 REQUIREMENTS FOR SUCCESSFUL YOUTH ENTREPRENEURSHIP EDUCATION IN SOUTH AFRICA	53
2.13 SUMMARY	55
CHAPTER 3: RESEARCH METHODOLOGY	58
3.1 INTRODUCTION	58
3.2 THE RESEARCH PARADIGM	61
3.2.1 Quantitative versus qualitative	62
3.2.2 Justification for the chosen paradigm	65
3.3 RESEARCH DESIGN	66
3.4 STUDY POPULATION AND SAMPLING	69
3.5 DATA COLLECTION	71
3.5.1 Secondary data	71
3.5.2 Primary data	71
3.6 MEASURING INSTRUMENT	72

3.7	QUESTIONNAIRE CONSTRUCTION	74
3.8	PILOT STUDY	75
3.9	DATA ANALYSIS	75
3.10	RESEARCH RELIABILITY AND VALIDITY	76
3.11	SUMMARY	77
	CHAPTER 4: EMPIRICAL FINDINGS AND ANALYSIS	78
4.1	INTRODUCTION	78
4.2	EMPIRICAL FINDINGS	79
4.2.1	Demographical findings of the study	79
4.2.2	Basic skills	88
4.2.2.1	Strategic skills	88
4.2.2.2	Operational skills	89
4.2.2.3	Competitions (outside influence)	89
4.2.2.4	Labour entrepreneurial skills	90
4.2.2.5	Management skills	91
4.2.3	Creativity and Innovation findings	94
4.2.3.1	Operational creativity and innovation	95
4.2.3.2	Studying entrepreneurship	95
4.2.3.3	Business challenges	95
4.3	RELIABILITY OF DATA	96
4.4	INVOLVEMENT OF LOCAL BUSINESS AND ORGANISATIONS	99
4.5	QUALITATIVE FINDINGS	100
4.5.1	Results of qualitative findings	100

4.5.1.1	Practical business skills	100
4.5.1.2	Strategic planning	101
4.5.1.3	Vision for entrepreneurship	102
4.6	GOVERNMENT POLICIES AND DEPARTMENT SUPPORT	104
4.7	SUMMARY	105
CHAPTER 5: SUMMARY, CONCLUSION AND RECOMMENDATIONS		107
5.1	INTRODUCTION	107
5.2	SUMMARY OF STUDY	107
5.3	RECOMMENDATIONS	111
5.3.1	Recommendations for further research	114
5.4	FINAL REFLECTION	115
5.5	CONCLUDING REMARKS	115
REFERENCE LIST		116
ANNEXURES:		
ANNEXURE A: THE QUESTIONNAIRE COVERING LETTER		124
ANNEXURE B: SCHOOL PROFILE		126
ANNEXURE C: COVER LETTER EXPLAINING THE PURPOSE OF THE QUESTIONNAIRE TO RESPONDENTS		128
ANNEXURED: QUESTIONNAIRE FOR TEACHERS		130

LIST OF TABLES

TABLE 1.1	LIFELONG ENTREPRENEURSHIP MODEL	8
TABLE 2.1	CONTENT FOR ENTREPRENEURSHIP EDUCATION	19
TABLE 3.1	COMPARISON OF RESEARCH PARADIGM	64
TABLE 3.2	PROFILE OF SAMPLE SCHOOLS No 1	70
TABLE 4.1	PROFILE OF SAMPLE SCHOOLS No 2	80
TABLE 4.2	DEMOGRAPHIC FINDINGS	87
TABLE 4.3	DESCRIPTIVE STATISTICS OF BASIC ENTREPRENEURSHIP SKILLS	92
TABLE 4.4	DESCRIPTIVE STATISTICS FOR CREATIVITY AND INNOVATION SKILLS	94
TABLE 4.5	RELIABILITY FINDINGS ON BASIC SKILLS	91
TABLE 4.6	RELIABILITY FINDINGS ON CREATIVITY AND INNOVATION	98
TABLE 4.7	INVOLVEMENT OF LOCAL BUSINESS FINDINGS	100

LIST OF FIGURES

FIGURE 3.1 OVERVIEW OF RESEARCH DESIGN	67
FIGURE 4.1 GENDER DISTRIBUTION	81
FIGURE 4.2 POPULATION GROUP	81
FIGURE 4.3 AGE	82
FIGURE4.4 HIGHEST QUALIFICATION	82
FIGURE 4.5 JOB TITLE	83
FIGURE 4.6 SUBJECTS TAUGHT	84
FIGURE4.7 WORKING EXPERIENCE	85
FIGURE 4.8 TEACHING EXPERIENCE	86

CHAPTER 1

INTRODUCTION AND SCOPE OF STUDY

1.1 INTRODUCTION

“Opportunities never come to those who wait; they are captured by those who dare to attack” (David Molapo 2002: 42)

The nineteen years of democracy in South Africa has done little to improve the lives of many young people who leave high schools unprepared to enter the job market. The blame for not preparing the learners fully is put on the teachers and the schooling system (Horn, 2006:113). The 2002 Global Entrepreneurship Monitor (GEM) Report stressed the importance of education and training potential entrepreneurs from primary and secondary schools in creating and managing small, new or growing businesses. The formal businesses require training in skills such as how to keep records, budgeting, managing cash flow, maximising trade credit and writing a business plan (Herrington, Kew and Kew 2009:45).

Although entrepreneurship education is offered in the Further Education and Training (FET) curriculum (Grade 10-12 level at secondary schools) it has not been effective in developing initiative, creativity and independence in learners as the rate of entrepreneurial activity in South Africa remains low (Brijlal, 2011:819). This indicates a lack of entrepreneurship elements in the education system in South Africa. The current education system does not provide for desirable core entrepreneurial attributes. The core desirable attributes, according to Timmons and Spinelli (2009:48), are intelligence, creativity and innovation, capacity to inspire, values and energy, health and emotional stability. Students have been taught to become proficient employees rather than being successful business people. Effective entrepreneurship education delivers the development of skills and competencies associated with successful entrepreneurship (Binks, Starkey and Mahon, 2006:6).

According to Herrington, Kew and Kew (2009:33), South Africa's low level of early stage entrepreneurial activity is influenced by:

- A low level of overall education especially in maths and science;
- Social and entrepreneurial factors that do not encourage entrepreneurship as a career choice.

It is thus important to conduct research on successful entrepreneurship education that can be effective in empowering school leavers.

1.2. RESEARCH PROBLEM

At present the chances of getting into the labour market are not favourable as there is a high rate of unemployment, staff retrenchment and unsuccessful job applications (Sathorar, 2009:3). The formal employment sector is no longer able to provide jobs for the increasing number of unemployed people. Fewer jobs are available for the economically active population of the South African economy, especially the school leavers who will therefore be required to provide for their own economic survival. Students are required to consider self-employment as they can no longer rely on the private or public sector to meet their career needs.

Herrington, Kew and Kew (2009:12) state that South Africa faces numerous economic, political and social challenges in its new democracy, of which a key challenge is that of massive and growing unemployment. This problem is especially evident amongst the country's youth, who more often than not lack the experience, skills and education necessary to access employment in the formal sectors. These young people are forced to create their own opportunities in an attempt to provide for their own form of employment. Ghazzawi (2010:14) says that the integration of entrepreneurial programmes into the education system in secondary schools is a prerequisite to develop the necessary skills to start and run successful future businesses. Exposure of learners to an entrepreneurship curriculum helps learners to be more advanced in their entrepreneurial ideas and education when compared to their counterparts who have not had such exposure. Educators need to introduce interactive methods in teaching entrepreneurship education programmes.

Entrepreneurship education has been researched by previous researchers by questioning both learners and educators. The present study will assess what has been previously researched and find gaps that need to be addressed. The

researcher will focus on the educators to obtain information about entrepreneurship education programmes that are introduced in each school and their effectiveness in developing entrepreneurship knowledge and skills in school leavers. The problem is an on-going phenomenon; therefore there is still room for further research especially in the rural areas and township schools of the Eastern Cape.

1.3 IMPORTANCE OF STUDY

Entrepreneurial activity in young people under 25 therefore represents a relatively as yet untapped source of new business start-ups and economic growth. The wide-spread increase in enterprise education has not been accompanied by independent research into the impact it has on young people and the benefits, if any, they may derive from their participation (Athayde, 2009:481). In South Africa the ratio of entrepreneurs to other workers is roughly 1 to 52 when compared to the ratio in developed countries where it is 1 to 10 (Nicolaidis, 2011:1043).

According to a World Bank report on the youth and the unemployed in Africa, youth currently comprise 37% of the continent's working age population, but they account for 60% of the total unemployed persons. Statistics South Africa estimates that 40% of the South African population is below the age of 20 and a further 19% between the ages of 20 and 30 years (Herrington, Kew and Kew, 2009:13).

Herrington, Kew and Kew, (2009:45) further stress the importance of including entrepreneurship education in the schooling system to develop:

- Learners' confidence about their ability to start business;
- Learners' understanding of financial and business issues;
- Learners' desire to start their own business;
- Learners' desire to undertake higher education.

The government's vision of Accelerated and Shared Growth Initiatives of South Africa (ASGISA) is for South Africa to become an entrepreneurial nation (Nicolaidis, 2011:1045). Cheung (2008:504) states that in Hong Kong, assisting

young people to become self-employed is one of the ways the government seeks to ease the territory's unemployment problem. Developing small and medium enterprises (SMEs) and encouraging people to start their own businesses are usually treated as the solution to problems such as unemployment and competitiveness that are created by globalisation.

The youth unemployment will continue to rise if nothing is done to teach learners entrepreneurial skills and to establish a culture of entrepreneurship at school level (Isaacs, Visser, Friedrich and Brijlal, 2007: 626). The outcome of not prioritising entrepreneurship education will be that:

- South African entrepreneurial activity will continue to be behind that of other developing countries unless entrepreneurship education is drastically improved in our schools especially in disadvantaged schools (Herrington, Kew and Kew 2009:41);
- The current situation of unemployment, poverty and insufficient absorption rate of scholars into the South African labour force will prevail (Brijlal, 2011:819);
- Schools of the Eastern Cape, mostly rural but some urban, will not prioritise entrepreneurship training programmes (Isaacs et al., 2007:620);
- The business studies subject taught in Grades 10-12 will continue teaching limited information and learners will not be exposed to real business issues.

Jones and Iredale (2006:234) state that if entrepreneurship education is improved it will:

- Empower learners to take responsibility and ownership of their own learning, education and training needs;
- Raise aspirations and expectations in terms of personal business and career opportunities;
- Help raise the prospects for long term economic growth by having the potential to increase the number of entrepreneurs and enterprising individuals;

- Facilitate culture change in favour of self-employment and the small and medium enterprise and break the culture of dependency.

Horn (2006:117) mentions that when skilled learners enter the labour market, the enterprises, nation and society benefit from their knowledge. The training improves the learners' self-confidence and boosts their morale and productivity. The two necessary conditions for economic growth in developing countries are education and entrepreneurship. Both education and entrepreneurship are recognised and advanced as major parallel operating factors or conditions of economic performance (Vetrivel, 2010:18). Students in entrepreneurship degree programmes start new companies or initiate corporate ventures at much greater rates than comparison groups of students without entrepreneurship courses (Jyothi, 2009:40).

Entrepreneurial skills are an integral part of twenty-first century planning education (Frank, 2007:642). Even if a free-standing course is provided in the curriculum, like Business Studies, its effectiveness will be enhanced if entrepreneurial insights are provided throughout the entire curriculum. If entrepreneurship education is isolated in a single course separate from the whole curriculum, it may be missed by many students who then would not profit from their potential development as enterprising individuals. Placing entrepreneurial concepts and the entrepreneur into the standard economics course not only makes the course more reflective of the real world, but it can also help to improve student's comprehension and enjoyment of economics.

According to Horn (2006:121) there have been problems across the country in establishing entrepreneurship programmes in schools because of the lack of educators who are able to teach entrepreneurship and the lack of suitable support material. Early exposure to entrepreneurship education makes learners interested in becoming entrepreneurs later in their lives. The goal of entrepreneurship should be to encourage creativity and innovation and self-employment (Martinez, Levie, Kelley, Saemundsson and Schott, 2010:11).

Garavan and O'Kinneide (1994) as cited by Nieuwenhuizen and Groenewald (2008:131) believe that the objectives of entrepreneurship and training programmes are to:

- Acquire knowledge that is relevant to entrepreneurship;
- Acquire skills that will help learners in analysing business challenges;
- Remove the fear of risk and encourage new start-up and other entrepreneurial ventures;
- Identify and stimulate entrepreneurial drive, talent and skills.

In terms of links with previous research, a similar study was identified in the Eastern Cape region that focussed on assessing entrepreneurship education at Secondary Schools in the Nelson Mandela Bay Metropole selecting only three schools (Sathorar, 2009). Sathorar (2009) focused on three schools in NMBM and she suggested further research on the impact of entrepreneurship education in secondary schools. This current study aims to build on the outcome of the earlier study.

When reviewing literature, it was mentioned that there was no acceptable paradigm nor suitable theories as to what entrepreneurship education should encompass and thus this area needs to be researched (Nicolaidis, 2011:1046). The present study will contribute to the design of successful entrepreneurship education programmes that will benefit the economy of South Africa because entrepreneurship growth is an essential component for attaining the Millennium Development Goal of poverty reduction (Nicolaidis, 2011:1044).

The government has tried to address the problem by restructuring the curriculum and offering subjects that are necessary for the social and economic development of learners. The aim was to broaden the access to a range of career options for learners. The National Curriculum Statement for Grades 10-12 was introduced as a new policy framework for teaching and learning for senior high school learners (Horn, 2006:123).

Athayde (2009:482) mentioned five concepts which are necessary in order to develop enterprise potential, namely achievement, personal control, creativity, leadership and intuition. Based on these concepts, a lifelong entrepreneurship model is proposed where learners are developed through the stages. Learners will be developed through stages when designing entrepreneurship education. The questions that will be asked of teachers will help to assess the skills which

are developed in learners in the current Business Studies subject and identify gaps that need to be addressed.

Timmons and Spinelli (2009:110) proposed six elements that are important for the entrepreneurship process:

- Opportunity should drive the process because a good idea is not necessarily a good opportunity;
- This opportunity can be driven by a lead entrepreneur and an entrepreneurial team;
- Resources that are used wisely and creatively ;
- The lead entrepreneur must find a perfect fit between opportunity, resources and the team;
- Integration of all elements holistically is important;
- environmental and social goals.

In the National Content Standards for Entrepreneurship Education, five stages for entrepreneurship training were proposed (Isaacs, et al., 2007:615). These stages should guide the development of learners from school level to the world of work. According to Ladzani and Van Vuuren as cited by Isaac et al., (2007:616) there is a need to do research on the impact of the entrepreneurship training programmes. Table1.1 shows that entrepreneurship training involves lifelong learning.

Table 1.1 LIFELONG ENTREPRENEURSHIP MODEL

ELEMENTS OF ENTREPRENEURSHIP	STAGES OF ENTREPRENEURSHIP	EXPECTED OUTCOMES
<ul style="list-style-type: none">• Gain prerequisite basic skills• Identify career options• Understand economics and free enterprise	STAGE 1	BASICS
<ul style="list-style-type: none">• Discover entrepreneurship competency• Understand problems of employers	STAGE 2	COMPETENCY AWARENESS
<ul style="list-style-type: none">• Learn entrepreneurship competencies• Apply specific occupational training• Learn how to create new business	STAGE 3	CREATIVE APPLICATION
JOB EXPERIENCE	JOB TRAINING	EDUCATION
<ul style="list-style-type: none">• Become self employed• Develop policies and procedures for a new or existing business	STAGE 4	START UP BUSINESS
<ul style="list-style-type: none">• Solve business problems effectively• Expand existing business	STAGE 5	GROWTH OF BUSINESS

Source: Isaacs et al., 2007:615

1.4 RESEARCH OBJECTIVES

The primary objective in the present study is to assess the current entrepreneurship education programmes offered at secondary schools in Grade 10-12 levels in Motherwell.

The primary objective will be achieved by pursuing the following secondary objectives:

- Establish the importance of conducting research on entrepreneurship and entrepreneurship education;
- Review the literature in order to discover global trends and learn from their approach;
- Explain the research methodology used for this research study in detail, in order to allow it to be reproduced in future;
- Conduct an empirical evaluation of the effectiveness of teaching entrepreneurship education programmes in the secondary schools and the support given by the Department of Education in the Motherwell schools;
- Provide recommendations on how to improve the current entrepreneurship education programmes at secondary schools of Motherwell.

The research design objectives guide the researcher in achieving the primary objectives.

In order to achieve the above objectives a mixed approach with the dominant paradigm being a quantitative study will be conducted as follows:

- A literature study will be conducted to establish global trends and to develop a benchmark for entrepreneurship education programmes by researching practises in other countries to determine what content should be covered in an entrepreneurship education programme;
- A literature study on the South African entrepreneurship programme offered to Grade 10-12 learners;

- An empirical study of the skills imparted through the current entrepreneurship education as part of the subject Business Studies;
- Proposals and recommendations will be rendered to improve entrepreneurship education programmes at secondary schools.

Based on the information above, the following research questions are formulated:

- What is entrepreneurship and entrepreneurship education?
- What can South Africa learn from global trends on entrepreneurship and entrepreneurship education?
- How can a detailed description be provided in order to understand and reproduce this research in future?
- How can the effectiveness of the current entrepreneurship education programmes be validated by empirical evaluation of the secondary schools in Motherwell and of the Department of Education support in the Nelson Mandela Metropole Municipality?
- To provide recommendations on improving the current entrepreneurship education programmes at secondary schools in Motherwell.

The questionnaires will be sent to the ethics department for clearance and also academic specialists and a statistician for checking before they are sent out to respondents.

This research follows a mixed approach.

1.5 METHODOLOGY OF THE STUDY

1.5.1 Research paradigms

Collis and Hussey (2009:56) identify two main research paradigms or philosophies, namely the positivism (quantitative) and interpretivism (qualitative) paradigms. The positivism (quantitative) approach originated in the natural sciences and rests on the assumption that social reality is singular and objective and is not affected by the act of investigating it. The researcher does not study individual human beings but rather seeks to identify relationships between variables that explain behaviours. The researcher plans the study, including the design of the data collection instruments, data collection and management

methodologies and data analysis, in great detail before the start of the research process (Borland, 2001: 9). In a quantitative approach the questions about the how and why of respondents' perceptions are much less common although they are likely to be of greater interest to a range of parties (Brand, 2008:431). A typical quantitative approach starts with a numeric definition which is likely to be based on the findings of a large-scale socio-economic survey (Blumberg et al., 2005:125). According to Borrego, Douglas and Amelink (2009:54) quantitative research uses statistics to examine whether there are differences in various items between the groups studied. The quantitative approach allows the researcher to project her findings onto the larger population.

Interpretivism (qualitative) believes that social reality is not objective but highly subjective because it is shaped by our perceptions. The researcher interacts with that which is being researched because it is impossible to separate what exists in the social world from what is in the researcher's mind (Collis and Hussey, 2009:57). Within the qualitative research paradigm, it is not only impossible to establish absolute truth, but even relative truth is bounded by the point in time and place in which it is observed as well as the perceptions of respondents, researcher, peer reviewer and consumer of the research. It seeks to describe much detail about a few selected individuals and can be used to formally develop theories and models to be tested via quantitative research (Borland, 2001:8). In a qualitative approach, the open-ended particularly in-depth questioning offers the possibility that respondents will answer questions using their own words, not guided by the researcher (Brand, 2008:431). The qualitative approach does not use large-scale surveys to learn about something but is based on findings on observations or deeper and less structured interviews (Blumberg et al., 2005:125).

1.5.2 Justification for the chosen paradigm

The research objective of the present study is to assess the teaching of the current entrepreneurship education programmes in secondary schools in Grade 10-12 level in Motherwell schools. The aim is to determine what content and practice needs to be included in entrepreneurship education in order to be

effective. This will be achieved by investigating the successful entrepreneurship education programmes.

The mixed paradigm will be used in this study because the researcher plans to assess the effectiveness of the entrepreneurship education programmes. The main aim is to be able to establish whether the teaching of the current entrepreneurship education programmes develops skills and imparts knowledge to learners. The researcher will interact with the educators when they answer questions. The researcher will identify the population of interest from which the sample is chosen. The sample should be large enough to be able to infer the applicability of the study's results from sample to the population. The researcher will use previously researched information and will plan the study, including the design of the data collection instruments and data analysis, before the start of the research process (Borland, 2001:9). The researcher will use all twelve Motherwell senior secondary schools and question the teachers.

The quantitative approach uses descriptive statistics to summarise the data in a more organised format which can be presented in tables, charts and other graphical forms. The primary aim of the present study is to assess whether the teaching of the concepts that are important in developing entrepreneurship skills and knowledge to learners is taking place in schools and then to present the findings.

1.5.3 The sample

In order to be able to establish whether the current entrepreneurship education programmes in the FET curriculum (Grades 10-12) adequately fosters the development of entrepreneurial knowledge and skills, these programmes will be assessed. This will be done by analysing the perceptions of the educators who are teaching commercial subjects in the selected schools where entrepreneurship education programmes are taught and how effective they are in developing entrepreneurial knowledge and skills.

The present study will focus specifically on the Motherwell schools in the Nelson Mandela Metro pole Municipality (NMMM). The NMMM in the Eastern Cape Province is the home to Port Elizabeth, Uitenhage and Despatch. The estimated

population comprises over 1, 5 million, making it South Africa's fifth largest city in terms of population and the second largest in terms of area (www.nelsonmandelabay.gov.za:10 March 2012).

Cluster sampling was used to select the twelve Motherwell senior secondary schools in the Motherwell township of Port Elizabeth. The cluster sample consisting of a 100% sample of the geographical area and all people belonging to the area will be surveyed (Evans, 2010:147). Questionnaires will be distributed to teachers at the selected schools to assess the current entrepreneurship education programmes offered in the secondary schools in Grade 10-12 levels in Motherwell. A minimum of three and maximum of six teachers involved in teaching commercial subjects at a Grade 10-12 level at each school will be required to complete the questionnaires. The questionnaires will contain questions concerning basic financial and business skills, creativity, innovation and desire for higher education, involvement of local business and organisations, views concerning risks, use of interactive teaching methods, common body for entrepreneurship education and support given by Department of Education.

It is envisaged that a questionnaire consisting of closed and open ended questions will be formulated for the concepts to be assessed to facilitate the gathering of information for the study.

1.5.4 Measuring instrument

The researcher will base the questions on the following concepts:

Learner's knowledge concerning:	Basic financial and business skills;
	Creativity, innovation and desire for higher education;
	Involvement of local business and organisations;
	Risks of starting a business;
	Common body, teaching methods and Department support.

The questionnaires assessing the concepts mentioned above will be developed for teachers. The questionnaires will be distributed to teachers involved in teaching commercial subjects at Grade 10-12 level at the sample schools. A covering letter explaining the purpose of the study will accompany the questionnaires. Respondents will also be assured in the letter about the confidentiality of their information. The researcher will arrange a meeting with the respondents to explain the purpose of the study and clarify any questions and will expect the respondents to answer the questions during this session.

1.6 TERMINOLOGY

A brief explanation of the concepts used in the study follows:

ASGISA:	Accelerated and shared growth initiative of South Africa. A government programme to halve unemployment by 2014.
Business Studies:	An optional subject in the curriculum for Grade 10-12. The subject focuses on business knowledge and issues.
Creativity:	Construction of ideas or products which are new and potentially useful (Fillis and Rentschler, 2010:50). Learners should be able think out of the box without being given all information by educators.
Entrepreneurship:	Entrepreneurship is a process of conceptualising, organising, launching, and through innovation, nurturing a business opportunity into a potentially high growth venture in a complex, unstable environment (Nicolaidis, 2011:1043).
Entrepreneurship education:	Entrepreneurship education is a 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 (Isaacs et al., 2007:614).

Innovation

Refers to the ability to apply creative solutions to problems and opportunities to enhance or to enrich people's lives (Zimmerer and Scarborough, 2002:37). In this study it refers to learners being able to come up with solutions to business problems.

Leadership

Refers to a person's ability to create energy and excitement and transform ideas and dreams into tangible visions that people believe they can achieve (Timmons and Spinelli Jr, 2009: 307). In this study it refers to the ability of a person to change ideas into business opportunity.

1.7 OUTLINE OF THE STUDY

The study will be divided into five chapters

Chapter 1: This chapter will outline the scope of the study, research problem, research objectives, research questions and methodology of the study.

Chapter 2: This chapter will contain a literature overview that focuses on the basic aspects of entrepreneurship education, investigate global trends and compare these with the South African approach to evaluate the current system against a bench mark and to describe the lessons learnt from global trends.

Chapter 3: This chapter will outline the research methodology, which includes the research paradigm, research design, study population and sampling design, data collection, measuring instrument, questionnaire construction and data analysis.

Chapter 4: In this chapter the empirical findings will be interpreted and summarised.

Chapter 5: This chapter will render recommendations and conclusion of the study.

1.8 SUMMARY

The purpose of conducting the research has been explained by presenting the research problem. The main research problem in the present study is to assess the current entrepreneurship education programmes offered at secondary schools in Grades 10-12 in Motherwell. There are fewer jobs that are available to the economically active population of the South African economy especially the school leavers. The learners exiting from the secondary schools in Motherwell appear to lack entrepreneurship skills and knowledge needed to start their own businesses. The study investigates whether the learners do in fact lack entrepreneurial knowledge and skills and makes recommendations on introducing entrepreneurship education programme into the schooling system. The limitations of conducting the study were identified from the literature review.

The research objectives guide the researcher in the stages to be followed when addressing the research problem. This chapter also explained the terminology that will be used in the current study and outlines the topics to be covered in the following chapters.

Chapter 2 will contain a literature review on global trends on entrepreneurship education programmes and a comparison with the South African approach.

CHAPTER 2

GLOBAL TRENDS ON ENTREPRENEURSHIP AND ENTREPRENEURSHIP EDUCATION

“For nothing in life that is worthy is ever too hard to achieve if you have the courage to try it and you have the faith to believe” (David Molapo 2002:59)

2.1 INTRODUCTION

Entrepreneurship is a process of innovation and new-venture creation through four major dimensions: individual, organisational, environmental and processes that are aided by collaborative networks in government, education and institutions (Kuratko and Hodgetts, 2007:47). It is the act of initiating, creating, building and expanding an enterprise or organisation, building an entrepreneurial team and gathering other resources to exploit an opportunity in the marketplace for long-term gain. It involves revitalising organisations in response to a perceived opportunity (Van Aardt, Van Aardt, and Bezuidenhout, 2000:31). Entrepreneurship is one driver of innovation that propels and sustains economic growth and is perceived to be the engine driving all economies regardless of the political system (Pena et al., 2010:3).

There is competition amongst countries globally and also amongst firms in almost all aspects of trade (Pena, Transue, Riggieri, Shipp and van Atta, 2010:3). Innovation and entrepreneurship help in solving the global challenges of the 21st century, building sustainable development, creating jobs, generating renewed economic growth and advancing human welfare (www.weforum.org 18 May 2012).

An entrepreneur according to Frank (2007:638) is the risk-taking individual who manages to transform an innovative idea into a profit-making business. An entrepreneur creates a new business, a life and a legacy by identifying opportunities and finding the resources to capitalise on them in the face of risk and uncertainty for the purpose of achieving profit and growth. An entrepreneur searches for the right opportunity and plans carefully when carrying out the entrepreneurial process (Kuratko and Hodgetts, 2007:47). Education and

entrepreneurship are recognised as necessary conditions for economic performance.

The exposure of learners to entrepreneurship education motivates them to follow a career in entrepreneurship. There is still a need to prepare the young people at secondary schools to be more entrepreneurial and to develop the necessary skills, attitudes and behaviours needed to pursue entrepreneurial opportunities (Izedonmi and Okafor 2010:54). The learners have to be trained in skills that will be required in the future. The high level of entrepreneurial activity in any country has the potential of improving the unemployment conditions and contributes towards economic growth (Antonites and Van Vuuren, 2005:256).

Entrepreneurship is important as it creates wealth and also promotes economic growth by providing job opportunities, as entrepreneurially minded individuals start on a small scale and later create big businesses (Ramanigopal, Palaniappan and Hemalatha, 2012:250). People who are exposed to entrepreneurship frequently use their creativity in various ways including their own lives. Many experienced business people, political leaders, economists and educators believe that encouraging an entrepreneurial culture will maximise individual and collective economic and social success on a local, national and global scale. It is with this mind-set that the National Standards for Entrepreneurship Education were developed to prepare youth and adults to succeed in an entrepreneurial economy (Ramanigopal, Palaniappan and Hemalatha, 2012:250).

Fuchs, Werner and Wallau (2008), as cited by Pihie and Bagheri (2011:434), stated that entrepreneurship education at school level should aim to provide students with skills and knowledge and thus has to incorporate experiential learning, practical training and project work in cooperation with enterprises.

Isaacs et al., (2007:616) propose the content in Table 2.1 for entrepreneurial training at high school level.

Table 2.1 THE CONTENT FOR ENTREPRENEURSHIP TRAINING

Motivation	Entrepreneurial skills	Business skills
Need for achievement	Creativity	Management/Leadership
Ability to inspire	Innovation	Business plans
Expectations of the higher achiever	Ability to take risks	Financial skills
Obstacles or blocks	Ability to identify opportunities.	Marketing skills
Help	Ability to have a vision for growth	Operational skills
Reactions to success or failure	Interpret successful entrepreneurial role models	Human Resource skills

Source: Isaacs et al., (2007:616)

It is thus important that entrepreneurship education be expanded in all nations and especially in the emerging economies. It is believed that entrepreneurship education is necessary to improve the entrepreneurial orientation of people. The Global Competitiveness Report 2009-2010 cites South Africa's inadequately educated workforce as one of the problematic factors for doing business in the country (Herrington, Kew and Kew, 2010:88). The benefit of entrepreneurship education according to Youth Parliament (2010:4) is that students will be motivated to learn and thus it may decrease the chances of failure. Entrepreneurial training and education create new opportunities and possibilities to do tasks in a different way. The entrepreneurship learner is supposed to be linked to businesses so as to be part of the real business environment (Antonites and Van Vuuren, 2005:260).

2.2 BACKGROUND OF ENTREPRENEURSHIP EDUCATION

The South African Institute for Entrepreneurship Education has been developing learning material for learners from primary school to secondary school. They train educators to be able to facilitate the business ventures programmes. These

business ventures offer learners from Grade 2 to 12 the opportunity to be involved in activities that capture their attention while acquiring entrepreneurship skills. All the learning outcomes of the Economic and Management Sciences are included in the business ventures. The various programmes start with “Start out” in Grade 7, “Sort out” in Grade 8, “Break out” in Grade 9, “Team up” in Grade 10, “Link up” in Grade 11 and “Work up” in Grade 12 ([www.saie's learningphilosophy.htm](http://www.saie'slearningphilosophy.htm) 13 March 2013).

According to the research done by Weber et al. (2009: 5), exposure to entrepreneurship education programmes has an effect on the entrepreneurial intentions of secondary school learners. The mind-set of learners could be changed after being exposed to entrepreneurship education programmes. The type of training done in secondary schools should involve business awareness education and in-field education and training for small business ownership after Grade 12. The training is aimed at stimulating entrepreneurship in learners (Raposo and Do Paco, 2011:455). The exposure of learners to entrepreneurship education programmes influences their propensity for entrepreneurship at a later stage. In countries like the United Kingdom, the exposure of learners to entrepreneurship programmes leads them to become owner-managers of established businesses and this leads to high job creation (Cowling, 2009:18).

The Entrepreneurship Development Programme in Nigeria is designed for the youth as an intervention strategy to solve youth unemployment. It informs learners about opportunities to create their own businesses and on the feasibility of turning business ideas into profitable ventures (Awogbenie and Iwuamadi, 2010:4).

The New Venture Creation Learner ship programme in South Africa is aimed at changing the behaviour of learners by creating inborn entrepreneurial awareness, encouraging the development and submission of business plans and the practical exposure of learners to sources of finance (Pretorius and Wlodarczyk 2007:506). The entrepreneurship education programmes aim to equip learners with initiative, creativity and tolerance for failure which they can also use in their everyday life (Anon., 2012:23).

The constraints on entrepreneurship education are the lack of knowledge about effective teaching techniques for entrepreneurship educators and the schools' lack of information about what is required. There are also no meaningful relationships with businesses and the Department of Education does not encourage the introduction of various entrepreneurship education programmes in Motherwell schools. The schools should inform and expose learners to a wide variety of career choices including entrepreneurship (Raposo and Do Paco, 2011:456). There is also a problem in enhancing creativity and innovation as these skills are mainly inborn.

This chapter will investigate global trends with regard to entrepreneurship education. A brief review of entrepreneurial trends in the United States of America (USA) will be described because the USA remains the world leader in implementing entrepreneurship education programmes at academic institutions and especially in secondary institutions (Pena, et al., 2010:9). A brief overview of entrepreneurship education in Canada, China, Hong Kong, Hungary, India and New Zealand will be discussed with specific reference to how entrepreneurship education is implemented at secondary schools and its effect on entrepreneurial activities in these countries. This will be followed by looking at the current state of entrepreneurship education in South African secondary schools and the lessons learnt from the various approaches used by Canada, China, Hong Kong, Hungary, India, New Zealand and USA.

2.3 ENTREPRENEURSHIP EDUCATION IN CANADA

In Canada, the younger people prefer an independent lifestyle and thus there is a potential to encourage entrepreneurship education (Fisher 2010:4). Entrepreneurship education in colleges and universities has grown rapidly over the last twenty years at rates of 444 per cent at the undergraduate level and 232 per cent at the graduate level (Entrepreneurship Education, 2011:64).

The rapid rate of growth is attributed to the private sector which has encouraged an entrepreneurial culture. Non-profit organisations such as the John Dobson Foundation in Canada have contributed much in encouraging entrepreneurship education in higher institutions (Entrepreneurship Education, 2011:64). The Fraser Institute established the Centre for Entrepreneurship programmes in order

to encourage the development of a more entrepreneurial culture in the secondary schools. It issues report cards on school performance to parents, educators and government so as to be able to monitor the performance of learners (Cowley, 2007:14).

2.3.1 The current state of entrepreneurship education in Canada

Entrepreneurship is a powerful driving force for innovation, productivity, job creation and economic growth. There is an increase in the number of potential and actual entrepreneurs because new firms have high survival rates (Fisher, 2010:2). It is thus important that Canada concentrates on developing entrepreneurship skills and knowledge in learners at an early stage. The younger people prefer an independent lifestyle and autonomy over working hours and conditions. Entrepreneurship will thus offer these conditions to learners if they are trained in their secondary education and acquire skills and knowledge about entrepreneurship.

2.3.2 Entrepreneurship programmes in Canada

Centre for Entrepreneurship Education and Development (CEED)

The entrepreneurship education programme in Canada teaches learners to not only obtain good marks academically through self-directed study but to also develop the personal qualities, characteristics, attitudes and skills needed to be successful in the workplace. The integrated curriculum allows learners to learn how to start and operate a business outside the traditional classroom. The programme allows for individualised learning and facilitates the links between the educational process and economic reality (www.ilo.org. 16 May 2012).

The programme has an integrated curriculum which includes venturing and allows learners to achieve high school credits whilst engaged in entrepreneurial activities. It is run by full-time certified teachers and students design and complete their own activities to achieve the requirements of their courses and receive credits for these courses. This programme started between 1993 and 1995 when founders of CEED developed entrepreneurial modules and programmes under the Department of Education's Entrepreneurship Initiative for courses in Maritime Studies, Economics, Science, Computer Related Studies

and one complete year-long programme for Grade 12 students called Entrepreneurship 12. The training programmes have been developed for school guidance counsellors and teachers of entrepreneurship education. Since 1995, more than 38000 students and 700 teachers have been involved in entrepreneurship education and thus it was introduced to form part of the curriculum for Nova Scotia students from Grade 3 to 12 (www.ilo.org, 16 May 2012).

The CEED has made a valuable contribution to Canada by introducing innovative techniques to education in each province and its success has been measured by greater school choice for families and better education. The Centre's website provides easy access to information on proven, replicable school models from around the world whose owners are ready and willing to assist in establishing Canadian branches (Cowley, 2007:15).

Enterprise Olympics

Enterprise Olympics is an annual competition celebrating the best student entrepreneurship activities in secondary schools. The competition consists of a showcase and business plan competition. The students in each school participate in regional showcases to determine those who will qualify to compete in the Enterprise Olympics competition (Smith and Salazar–Xirinachs, 2006:51). The competition encourages active participation of learners as they compete to win prizes under the guidance of educators.

2.4 ENTREPRENEURSHIP EDUCATION IN CHINA

Although China has experienced remarkable economic growth, the level of youth and adult unemployment has also been rising, due mainly to a progressive shift from agriculture to less employment-intensive manufacturing and service industries. When China joined the World Trade Organisation (WTO) in 2001, trade liberalization forced the economy to become more flexible and competitive. The Chinese government in line with the recommendations of the United Nation's World Youth Report and World Millennium Development Goals has embarked on an effort to improve the education system and to focus on entrepreneurship education (Millman, Matlay and Liu, 2008:803).

Countries around the world including China have increasingly focussed on entrepreneurship and innovation as the way forward for building new knowledge and creative approaches, increasing global competitiveness, addressing the growing challenges of increasing unemployment and creating new jobs. Entrepreneurship encourages growth, creativity and innovation .Innovative entrepreneurs come from public, private, academic and non-profit sectors (www.weforum.org.18 May 2012). In 2005, China became the fourth largest and fastest growing economy in the world and the growth has been led by small and medium-sized enterprises (Millman, Matlay and Liu, 2008:803).

2.4.1 The current state of entrepreneurship education in China

Education has been identified as one of the primary components of poverty reduction efforts and overall social development in China. The Chinese government has been under tremendous pressure to accept entrepreneurship as a key element of policies aimed at solving the youth unemployment problems and to focus on the benefits provided by entrepreneurship education. It has thus prioritised entrepreneurship education as a key in solving youth unemployment because learners are encouraged to be job creators. Entrepreneurship is regarded as the driving force behind the rise of entrepreneurial attitudes, competencies and skills (Millman, Matlay and Liu 2008:806).

Realising the significance of entrepreneurship education, Chinese authorities called for its introduction into the secondary school curriculum (Cheung, 2008:501). The main entrepreneurship education activities comprise student business plan competition and relevant part-time work placement. There are two main types of entrepreneurship education: entrepreneurship education pilot programmes and know about your businesses which were launched by the Minister of Education and the International Labour Organisation (Millman, Matlay and Liu, 2008:806).

After the 1990's, entrepreneurship programmes at the undergraduate and post-graduate levels began to emerge with the launching of student business plan competitions and setting up of the National Entrepreneurship Research Centre. Three models of entrepreneurship education: A Personal Quality Development Approach, a Business Venture Skills Development Approach and an Awareness

Raising and Skills Development Approach then started. The key drivers for the development of entrepreneurship education were rapid development in rural areas and rural enterprises; demand for management programmes to ensure better management of millions of firms, either state owned or newly created collective firms (ideas.repec.org. 18 June 2012).

Teachers are the key to reaching students and providing the scaling needed in entrepreneurship education. Teachers should be empowered, applying the same rules and skill sets as students. An environment needs to be created for teachers where they can also develop themselves to become cycle breakers, leaders and guides. In order to teach entrepreneurship education most effectively, teachers need to learn new skills such as using interactive teaching methods (www.weforum.org. 18 May 2012). This means instead of using the traditional approach, they would use a variety of teaching strategies in order to achieve different levels of learning. The teaching strategies include having workshops with students, running business competitions, using case studies and project learning and they also include mentoring programmes but all still rely on a didactics approach (Cheung, 2008:507).

2.4.2 Entrepreneurship programmes in China

The Bright China Foundation was started in 2005 to focus on education and economic development. It runs many programmes including a very prominent youth entrepreneurship education initiative. It has grown rapidly and is active in 11 provinces, reaching some 5000 young people and licenses materials from the National Foundation for Teaching Entrepreneurship. The Foundation has a good relationship with the vocational department of the Ministry of Education but operates its own schools and deploys its own teachers in addition to working with teachers in the public school system (www.weforum.org. 18May 2012).

The “Know about Business” Programme aims to impart entrepreneurial knowledge and skills and to prepare learners for the world of work. The learners are able to own and start their businesses after being involved in the programme and also acquire an enterprising mind-set and attitude which they can apply in various aspects of life (De Rezende and Christensen, 2009:11). Through interactive and participatory teaching methods, this programme aims to develop

entrepreneurial skills, attitudes and mind-sets among young men and women. It motivates youth to consider and explore the option of being an entrepreneur and provides practical and essential information about opportunities, challenges, procedures, characteristics and attitudes needed for entrepreneurship. It also aims to raise awareness among students about the important role that sustainable enterprises play in the economy and society (De Rezende and Christensen, 2009:12).

2.5 ENTREPRENEURSHIP EDUCATION IN HONG KONG

2.5.1 An overview of entrepreneurship in Hong Kong

The era of globalisation's impact is felt by large corporations and governments worldwide. The big businesses are outsourcing their functions resulting in fewer jobs in big companies. The governments are privatising their operations in order to lower expenditure and strong competition globally causes people who do not have special skills to lose jobs. This leads to a change in mind-set and promotes entrepreneurship and thus a demand for entrepreneurship programmes (Cheung, 2008:16). The large numbers of school leavers who are not taught entrepreneurship education in secondary school become a burden to the economy. In order to be able to solve the problems of globalisation such as unemployment and competitiveness, people are encouraged to start their own businesses (Cheung and Au, 2010:48).

2.5.2 The current state of entrepreneurship education in Hong Kong

Entrepreneurs are respected and valued for sustaining economic development in Hong Kong and many people still aspire to have their own business (Chua 2002:3). Although entrepreneurs play an important role, schools are not preparing learners to be future entrepreneurs (Cheung and Au, 2010:45). The young people are interested in starting their own businesses, but do not possess the experience and entrepreneurial skills to do so (Cheung and Au, 2010:46). Even for pupils taking the business stream in secondary schools, the present curriculum does not include much of the required entrepreneurial training programme. The students who take courses in economics and business studies

may be exposed to entrepreneurship on a small scale but this would vary from school to school (Chua, 2002:69).

The existing business curriculum in Hong Kong secondary schools lacks significant programmes in either small business management or entrepreneurship. No courses specifically on entrepreneurship are taught in the schools. The Hong Kong education system has not been preparing its youth for a knowledge-based economy as young people who enter the job market lack independent thinking and creativity. The education system encouraged rote learning and a narrow curriculum geared towards passing examinations (Chua 2002:18).

The education system should be reformed to encourage entrepreneurship. Class size should be reduced and investment must be made in training teachers. The teachers should teach young people how to think critically and analyse opportunities and risks, proposing answers rather than choosing answers. The Hong Kong people are entrepreneurial and have a strong desire to create and own a business, to be their own boss, to become socially respected through making money in business and to continue family traditions in entrepreneurship (Chua, 2002:57).

Entrepreneurship education should be promoted so as to develop an enterprise culture among the learners and both the art and the science elements of entrepreneurship should be taught. The science element involves the business and management functional skills while the art element relates to the creative and innovative attributes of entrepreneurship (Cheung and Au, 2010:46).

Education has always been academically oriented with much of the focus on the theoretical part and further studies and little on the pupil's career aspirations. There is still a gap between the skills that pupils will need as employees and the skills that they learn in school and thus integration of entrepreneurship education into the general curriculum of secondary schools is an important issue facing policy makers of curriculum development (Cheung, 2008:18). The reformation in education tries to narrow the gap between the educational system and workplace. It also aims to help pupils understand a variety of issues concerning diversity, globalisation, information technology, business ethics and responsibility

so that they can face the new challenges of today's business world (Cheung, 2008:18). Entrepreneurship is the key to Hong Kong's economic success. The government is fully committed to providing an environment conducive to the development of new businesses (Chua, 2002:11).

The non-profit organisations have taken the initiative to fill the void. They invite schools to take part in the programmes that they organise. The business plan competitions are often an effective means for students to apply what they learn about entrepreneurship and business. Students may participate in a competition at their schools if organised or they may compete with other schools in a Hong Kong wide competition. Non-profit organisations have held business competitions for students from secondary schools to universities (Chua, 2002:70). In schools, teachers use a variety of teaching strategies in order to achieve different targets. Experiential learning is a top priority in schools and lessons are designed to move away from the traditional rule-based, procedure-oriented mode to a more dynamic, interactive learning mode (Cheung, 2008:506).

Although entrepreneurship education is not officially in the secondary school curriculum in Hong Kong, business educators organise activities to equip pupils with a sense of entrepreneurship. One of the popular activities to teach entrepreneurship skills is the operation of a kiosk before Chinese New Year by pupils from different schools selling things ranging from flowers to toys in temporary stalls (Cheung, 2008: 21). The interested participants bid for the stalls just a few months before Chinese New Year. The learners are encouraged to plan what they are going to sell in those few days of operation. For the past years, many schools have participated in this activity and teachers have recognised it as a good opportunity to teach entrepreneurship education (Cheung, 2008:21).

Research shows that learners who participated in the activity were willing to stay in school late to prepare for the activity voluntarily and showed a strong sense of responsibility and commitment to work. Some pupils indicated that they used to be bored during lessons and it was the first time that they participated so actively in a school activity and learnt things not found in textbooks. Other learners indicated that before the activity they used to think that running a business was

not difficult and after the activity they gained an idea of what entrepreneurship entails and were confident to face the challenges. The activity confirms that entrepreneurship education encourages the development of skills and attributes that employers are looking for such as teamwork, commitment and flexibility (Cheung, 2008:28).

Junior Achievement which was established in Hong Kong in 2001 is a non-profit organisation operating in 110 countries. Its mission is to educate and inspire young people from kindergarten to the post-secondary level and to develop knowledge and skills in enterprise creation, business and economics. Its supplementary educational offering, which is hands-on and experiential, is facilitated by business volunteers from the multinational and local companies as well as business owners (Chua, 2002:19).

Work related skills and attitudes need to be developed in all learners at secondary level to benefit pupils of weaker academic ability who might go to work after high school or stronger academic ability who will go work after university graduation. In either case, entrepreneurship education provides the necessary training to equip pupils for their future careers. Policy makers should incorporate a comprehensive entrepreneurship education programme into the school curriculum. The programme should be a life-long programme catering for different age groups of people ranging from basic education in primary and secondary schools to vocational institutions and universities as well as adult education centres. Entrepreneurship education benefits pupils, employer and the society and deserves to be taken seriously (Cheung, 2008:29).

The Hong Kong government is committed to developing an environment that is conducive for Small, Medium and Micro-sized Enterprises (SMMEs) to grow and improve in the area of technology application and innovation. There is legislation for intellectual protection to encourage innovation (Chua, 2002:17).

2.6 ENTREPRENEURSHIP EDUCATION IN HUNGARY

2.6.1 An overview of entrepreneurship education in Hungary

Entrepreneurship can be considered as a general requirement for the economic growth of any country. The objectives of entrepreneurship education are to

promote the development of skills and knowledge among the young people (Csapo and Pethoe, 2006: 1).

In Hungary, during the nineties there was transformation and thus the introduction of a market economy made a new challenge and they realised that entrepreneurship and the entrepreneur should be the driving force of the development and change (www.sbaer.uca.edu 27 April 2012). Previously, there were no Hungarian best practises to follow and so entrepreneurs had to learn from their own mistakes as no curriculum in the field of entrepreneurship education was available. Since the beginning of 1990's, there has been a significant increase in the demand for entrepreneurial skills and knowledge that can be used by people considering establishing and running a new enterprise (Csapo and Pethoe 2006:1).

2.6.2 The current state of entrepreneurship education in Hungary

The promotion of economic sensibility and judgement among teenagers cannot be achieved by lessons and various programmes which are taught and offered by secondary schools. Kadek (2004), as cited by Csapo and Pethoe (2006: 2), mentions that there are several programmes and movements for teenagers, which have the goal of introducing secondary school students to business life and presenting them with elements of entrepreneurial success. In 1993 some new additional enterprise approach programmes were started, these being the National Society of Enterprise Educating Teachers and the Junior Achievement Project (www.sbaer.uca.edu 27 April 2012).

Financial experts, businessmen and venture teachers founded the JAM Foundation which offered a syllabus in the topic of developing economic knowledge and enterprising abilities from the first class of primary school through all classes to the final exams. The Foundation not only provides an up-to-date, self-developed syllabus for enterprising students, but also offers summer camps, meetings with businessmen and chances for representatives to introduce possibilities at the occasions of student enterprise markets organised twice a year (www.sbaer.uca.edu 27 April 2012).

2.6.3 Entrepreneurship programmes in Hungary

Schemes that promote partnerships between schools and enterprises are commonly found. The Junior Achievement programme in Hungary gives 10 000 students in 50 schools the opportunity to meet and learn from entrepreneurs (Evaluation of Programmes Concerning Education for Entrepreneurship, 2009:21).

One of the first initiatives was the establishment of two successful international programmes: the Junior Achievement and Young Enterprise programmes. Both these programmes have the aim of infusing an entrepreneurial attitude amongst secondary school students. The Junior Achievement Hungary Foundation was founded in 1992 and its programme is taught in 321 secondary schools. More than 57 000 students have participated in this programme. Among their activities, Junior Achievement and Young Enterprise programmes organise school programmes where students create and run mini-companies during one school year. These are real enterprises operating in a protected environment, producing and selling real products and services. These companies promote the improvement of creativity of the participants in order to generate practical business ideas. The students learn to be responsible for their work and they can get to know themselves better through this project. The students learn the preconditions of running a successful enterprise under simulated conditions and have various roles as managing director, manager of sales, marketing account manager, accountant according to the organisation of the firm. These programmes provide the students with practical business knowledge (Csapo and Pethoe, 2006:3).

The problem encountered in teaching in Hungarian primary and secondary schools is that teachers encourage rote learning and do not encourage learners to discover and acquire knowledge. This was the case in many schools with entrepreneurial programmes. The teachers continued to teach using the old methods which were fruitless in the case of curricula that required interactive methods. There was no institutionalised educational system where the future enterprise educators could prepare for their job and no professional workshops (www.sbaer.uca.edu 27 April 2012).

2.7 ENTREPRENEURSHIP EDUCATION IN INDIA

2.7.1 An overview of entrepreneurship education in India

India is the tenth largest economy by market exchange rates, with the average annual GDP growth rate of 5, 8% over the past two decades and reaching 10,4 % by 2010. It is one of the world's fastest growing economies and ranks 39th in innovation ahead of several advanced economies (www.en.wikipedia.org. 12 April 2012). The eradication of unemployment among youth has become the biggest development challenge in almost every country in general and India in particular. Entrepreneurship education can be used as a tool for the eradication of youth unemployment (Venkatachalam and Waqif, 2005:59).

There is a need to broaden the scope of general education by imparting new knowledge and skills which are relevant to the world of work. The transition between teaching and learning, school and work, knowledge creation and knowledge distribution have been under scrutiny in India. They realised that the child has to be perceived as an entrepreneur of the future who is able to function in a competitive global environment (Vaidya, 2007:2).

Entrepreneurship development in India is considered as very effective and a potential tool for wealth creation, employment generation and poverty alleviation. On potential entrepreneurship activity, India scored 52% compared to 17% in China, 4% in Russia and 25% in Brazil. The GEM Report 2008 has worked out entrepreneurial attitude and perception in 43 GEM member countries, by phase of economic development and India scored quite high on almost all the parameters (Awasthi, 2011:108).

The scope of entrepreneurship development in a country like India is tremendous especially when there is a widespread concern that acceleration in GDP growth in the post-reform period has not been accompanied by a commensurate expansion in employment. Even during the global economic meltdown, India's economy performed much better than the major world economies and grew at a decent 7% because of its planned intervention in fostering entrepreneurship through training, teaching and research (Awasthi, 2011:109). The rising unemployment rate in India has resulted in growing frustration among the youth.

The unemployment rates may not be sustainable without the right kind of education system. According to Vaidya (2007:4) the education system should meet the needs of present day challenges and be fully geared to participate in societal transformation.

2.7.2 The current state of entrepreneurship education in India

The introduction of elementary entrepreneurial education as part of compulsory general education was introduced in India to bridge the gap between the demands of jobs in terms of teamwork and decision-making and the way education prepares the learners for the workplace. Its objectives were much more than just preparing students for higher education but also ensured that each child is fully developed in human personality, citizenship while also laying the foundation for employability. They believed that these core skills should be part of each child leaving the school (Vaidya, 2007:2).

The National Curriculum Framework (NCERT) 2005 was introduced in order to reconstruct the school education system. The aim of the curricula for India is to provide children with opportunities for participating in social and economic activities inside and outside the classroom and not to be confined to the four walls of the school nor can it be provided by the teacher only. Programmes should be planned and implemented that the local community, community development organisations and government agencies participate in them and cooperate with the school (Vaidya 2007:3). The solution to the teaching of entrepreneurship is to partner with local entrepreneurs and bring them to the classroom so as to help learners understand the real world experience of entrepreneurship (Venkatachalam and Waqif, 2005:65).

Entrepreneurship development is seen as a continuum that starts with the creation of awareness about entrepreneurship amongst the youth so that they start thinking in terms of entrepreneurship as a viable and lucrative career option and the creation of new enterprises (Awasthi, 2011:110). It increases the supply of capable entrepreneurs within the economy. The objectives of entrepreneurship education programmes are to increase the pool of people who have the career orientation, motivation, desire and ability to start their own businesses and to seek suitable opportunities to improve their chances for survival and growth. The

ultimate goal is new venture creation, higher self-realisation and job generation (Venkatachalam and Waqif, 2005:61).

2.7.3 Entrepreneurship programmes in India

Wipro Mission Education's aim is to improve the quality of education in India. It engages with schools, parents, education boards and other social organisations to create a desire for change. It works with schools in 14 states across the country with projects that range from training programmes for teachers and school leaders to concerted efforts for transforming entire schools (Kee, et al., 2008: 18).

I Create Incorporation is a non-profit organisation dedicated to providing Integrated Entrepreneurship Training to the disadvantaged communities in India in both rural and urban areas. It works together with NFTE, New York and has grown to be a national organisation with regional centres in the East, West, North and South. In its regional centres, it conducts aspiring entrepreneurship workshops, business plan competitions and much more (Kee, et al., 2008:18).

The education and training should contribute to encouraging entrepreneurship by fostering the right mind-set, awareness of career opportunities as an entrepreneur and the requisite managerial skills. The running of a virtual enterprise within a school can be used as a training aid for students. The students can divide their time between theoretical knowledge and running a virtual enterprise (Venkatachalam and Waqif, 2005:64).

2.8 ENTREPRENEURSHIP EDUCATION IN NEW ZEALAND

In New Zealand, there is a national curriculum framework which gives direction for teaching and learning. The curriculum allows schools to be future focussed in developing learners in citizenship, enterprise and globalisation. It is believed that entrepreneurship education should be compulsory for secondary schools (Youth Parliament, 2010:2).

The teaching and learning process is directed towards developing those skills, competencies, understandings and attributes which equip young people to be innovative. It also enables learners to identify, create, initiate and successfully

manage personal, community, business and work opportunities including working for them (Youth Parliament, 2010: 4).

Education for Enterprise provides learning experiences that encourage young people to be active participants in their learning. It involves acquiring knowledge across the eight curriculum learning areas and key competencies of the New Zealand Curriculum and promotes effective teaching practice which is able to prepare students to meet future challenges using modern learning approaches. It could include learning experiences that:

- Give all students opportunities to think and act in an enterprising way across the curriculum and/or in specific learning areas;
- Put a clear focus on the key competencies and in particular, enterprising attributes;
- Give students opportunities to demonstrate the transfer of skills and knowledge into new contexts;
- Give students opportunities to engage with local businesses and communities on real projects and
- Allow students to take risks as entrepreneurs (Youth Parliament, 2010: 4).

Considerable staff development is often needed to develop teachers' perceptions of enterprise education and help them to translate their abilities into appropriate classroom pedagogy. Teachers should give learners hands-on activities and involve role models from the community and business links (Lewis and Massey, 2003:200).

2.8.1 Entrepreneurship Programmes in New Zealand

The Enterprise New Zealand Trust (ENZT) plays a leading role in delivering enterprise education experiences to school students in New Zealand. The Young Enterprise Scheme is its flagship programme and was established in 1980 to give secondary school students the opportunity to run their own businesses during the course of the school year within the school environment. The students involved form a company and develop a product or service which they then market and

sell and liquidate the company at the end of the school year (Lewis and Massey, 2003:197).

Many schools have student-led activities that have an enterprise focus e.g. market day, school productions, magazines and garden and art competitions. Another source of extra-curricular enterprise education in secondary schools is through the programmes and activities sponsored by The Lion Foundation Young Enterprise Scheme (YES). YES in New Zealand has The Lion Foundation as its principal supporter, with part funding from the Ministry of Youth Development and the Ministry of Education and is administered by the Young Enterprise Trust. It is a learning experience for young people, teachers and business people in which senior secondary school students form a company, become directors, develop products and services, which they market and sell. YES is school-based and teaches skills in budgeting, planning, interpersonal relations, decision making, reporting, communications, risk management and teamwork (Youth Parliament, 2010:5).

This model is a good reference on how entrepreneurship education can be taught in New Zealand and could be used as a guide as to how business-specific endeavours can be implemented in secondary schools. The YES programme has been running in around 40% of New Zealand secondary schools as an in-class activity or as an extracurricular option. The teams are supported by a teacher in charge from the school, a regional coordinator from the Enterprise New Zealand Trust and a mentor from the business community (Lewis and Massey, 2003:198).

2.9 ENTREPRENEURSHIP EDUCATION IN THE UNITED STATES OF AMERICA (USA)

2.9.1 Overview of entrepreneurship in the USA

Entrepreneurship education started over a century ago, with organisations such as the Junior Achievement as pioneers (www.weforum.org. 18 May 2012). Over the past decade, community leaders across the US and around the world have embraced entrepreneurship as an important tool in building wealth and in building local economies (www.nfte.com.15 April 2012).

Around the world, there are innovations that are derivatives of the entrepreneurship education model and philosophy (Timmons and Spinelli, 2009:9). Entrepreneurship education is now gaining a foothold from elementary through to high school in at least 30 states. Only nine states have formal legislation that promotes entrepreneurship education at the K-12 level (www.nfte.com. 15 April 2012). Entrepreneurship education is seen as a major milestone to reform education systems in order to improve relevance to better equip young people for life and work. Entrepreneurship education plays an essential role in shaping attitudes, skills and culture from the primary level up (www.weforum.org 18 May 2012).

In the USA and Europe, recent studies have revealed a high number of students who drop out of school. Entrepreneurship education may be a factor in helping to keep students in school by unleashing the innate spirit, using interactive experiential forms of teaching and learning that link the classroom with the workplace (www.weforum.org 18 May 2012).

2.9.2 The current state of entrepreneurship education in the USA

Americans agree that when it comes to entrepreneurs, they like, respect and need them to build economic prosperity (www.nfte.com 15 April 2012). The young entrepreneurs need to be nurtured by parents; their teachers and their communities. Entrepreneurship education can achieve this equality (www.nfte.com 15 April 2012). One of the biggest challenges facing the American economy is to grow a more skilled and productive workforce. The nation's future prosperity depends on the ability to encourage a wide and diverse talent pool with an entrepreneurial mind set and to provide the skills to succeed, prosper and compete in today's economy. The high school drop-outs are warning signs of growing problems in the education system because nearly one-third of public high school students fail to graduate (www.nfte.com 15 April 2012). The schools are not adequately engaging young people because they do not see the connection between what they learn in school and future success in life. Through entrepreneurship education, students learn how to create business and the core outcomes created include:

- The ability to recognise opportunities in one's life;

- The ability to pursue such opportunities by generating new ideas and marshalling needed resources;
- The ability to create and operate a new venture; and
- The ability to think in a creative and critical manner (Raposo and Do Paco 2011:445).

The leading programmes such as those operated by the National Foundation for Teaching Entrepreneurship (NFTE) and Junior Achievement (JA), serve tens of thousands of students from low income communities each year but they only touch a small part of the potential market. The successful programmes that are in place have small pockets of excellence because there is no system in place that offers entrepreneurship education as an option for all students (www.nfte.com 15 April 2012).

Three groups in the USA drive the development and promotion of entrepreneurship education programmes:

- Federal state and local governments;
- Academic institutions;
- Non-profit and other private institutions (Pena et al., 2010:7).

The Federal Government may be able to improve entrepreneurship education programmes by creating a national system for accreditation and certification. The Kauffman Foundation's Scholar Programme and NFTE's Entrepreneurship Programme offer certification to students who have completed the requisite hours of entrepreneurship courses. NFTE's Entrepreneurship Teacher Certification offers entrepreneurship educators certification and career development opportunities (Pena et al., 2010: 25).

Non-profit organisations play a significant role in entrepreneurship education in secondary and post-secondary schools by providing educational and mentoring programmes through the Consortium for Entrepreneurship education, Network for Teaching Entrepreneurship, the Kauffman Foundation and the National Collegiate Inventors (Pena et al., 2010:28).

Effective entrepreneurship education uses a host of new teaching techniques such as distance education, experiential learning, problem-based learning and team building. In order for these programmes to be effective; there should be professional development of educators. They should engage local entrepreneurs as mentors, coaches, speakers and role models and have partnerships with local business organisations such as Chambers of Commerce, Small Business Development Centres, Entrepreneur's Organisations or local civic clubs such as Rotary. These partnerships bring new ideas to schools and build stronger business education partnerships (www.nfte.com15 April 2012).

2.9.3 Entrepreneurship programmes in USA

Academies of Entrepreneurship (AoE)

The programme was established to bring innovative approaches in teaching and learning in New Orleans' area high schools. The learners are taught skills including business and entrepreneurship, management, budgeting, writing a business plan and developing presentation skills. The programme combines classroom education with hands on learning throughout the 11th and 12th grades where students are required to form a business that draws on their skills or hobbies. The curriculum includes field trips, seminars and guest classroom presentations and also exposes learners to positive role models with whom they can relate (Smith and Salazar-Xirinachs, 2006:99).

EcoVentures (EVI)

EcoVentures introduces young people to the concept of entrepreneurship education through close integration with social and environmental education. It focuses on moving youth into prevention projects like renewable energy projects. The curriculum facilitates the identification of environmental and social challenges in the local area and leads students through a process in which they find appropriate business solutions. The youth are able to develop their livelihood opportunities and entrepreneurial potential. The EVI focuses on developing entrepreneurial skills amongst young people by taking them step by step through setting up and running their own environmental enterprises with the participation of the community (Smith and Salazar-Xirinachs, 2006:102).

Junior Achievement

The programme uses hand-on experiences to help young people understand the economics of life. In partnership with business and educators, the programme brings the real world to students, opening their minds to their potential and also teaches students about the future economic benefits of staying in school. It also helps teens make difficult decisions about how to best prepare for their educational and professional futures and to develop their communication skills that are essential to success in the business world (Kee, et al., 2008:16).

Enterprise Prep (Preparing at-risk teens)

This is a hands-on; standards-based business ownership and skills curriculum programme which targets at-risk low-achieving teens in Philadelphia high schools. The programme targets students with a history of poor attendance and low marks in tests. The learners are given the opportunity to own businesses and by being responsible for the success of their businesses give them reason to learn, build self-confidence and inspire ambition and achievement. In order to maximise profits and dividends, they hold corporate meetings during which they master fundamentals of small business management. This programme can improve attendance and marks because learners can see the reason for coming to school (Smith and Salazar-Xirinachs, 2006:102).

National Foundation for Teaching Entrepreneurship (NFTE)

This is a non-profit organisation which was formed in order to reduce dropout rates and improve the academic performance of students. It targets students from low-income communities with the view that entrepreneurial education reveals the real world relevance of classroom learning, helps students build skills and creativity and improves their quality of life (Pena, et al., 2010:13). The programme has a proven track record of success and is frequently used as a model for other programmes to teach business knowledge and business formation. It has reached over 150 000 young people since its foundation and has programmes in 28 states and 13 countries outside the United States. NFTE develops entrepreneurship curricula, trains teachers and provides on-going support for NFTE courses through schools, after-school programmes, summer

camps and online. Each student in the programme writes and presents a business plan (Kee, et al., 2008:16).

2.9.4 Potential benefits from entrepreneurship education in USA

In the USA, because of the introduction of various programmes, certain benefits are reaped:

- Increased entrepreneurial activity by encouraging youth and adults to consider entrepreneurship as a viable career path;
- Greater diversity in entrepreneurship by allowing a wider diversity of groups to learn the skills and develop the networks to successfully engage in entrepreneurial activities;
- More entrepreneurial success if entrepreneurship is taught effectively;
- Better motivation for at-risk groups to complete formal education and reduce school drop-outs;
- More business-savvy population because entrepreneurship education teaches lifelong learning and 21st century skills; and
- Improved creative and critical thinking (Pena, et al., 2010:16).

2.9.5 Challenges facing entrepreneurship education in USA

The critical factor in the introduction of entrepreneurship education is the use of technology as a method of programme delivery. Technology has the benefits of cutting long-term costs while expanding training capabilities and opportunities. The most prevalent cutting edge technology in entrepreneurship education is virtual learning which offers students the realistic simulation of a business environment in which they develop their entrepreneurship skills (Pena, et al., 2010:14).

Despite the growth in entrepreneurship courses and degrees, a survey of entrepreneurship education in schools showed a negative trend regarding the incorporation of technology into the entrepreneurship education. Some entrepreneurs indicated that secondary education classes that covered or used technologies were influential in their decisions to become high technology entrepreneurs (Pena, et al., 2010:28).

America's future competitiveness will suffer if the education system sends poorly prepared workers, managers and entrepreneurs into the workforce. The young people will not be able to compete with countries such as India and China which are becoming major sources of scientific and technological talent (www.nfte.com 15 April 2012).

2.10 ENTREPRENEURSHIP EDUCATION IN SOUTH AFRICA

2.10.1 An overview of entrepreneurship education in South Africa

South Africa faces numerous challenges, economically, politically and socially, in the new democracy. One of its key challenges is massive and growing unemployment. Most of the people affected are the country's youth who lack the experience, skills and education necessary to access employment in the formal sectors (Herrington, Kew and Kew, 2010:12). The realistic option for most teenagers in certain countries is to create their income generating activity in the informal sector because of lack of skills.

According to Orford et al., (2004), as cited by Nieuwenhuizen and Groenewald (2008:130), South Africa ranks in the lowest quartile of all the developing countries with only five out of every hundred adults being an entrepreneur. There are too few people with entrepreneurial qualities and this has led to an underperforming economy because only a very limited number of people succeed as entrepreneurs (Nieuwenhuizen and Groenewald, 2008:130). Entrepreneurship training is important for the success of business ventures.

The ratio of entrepreneurs to other workers was roughly 1 to 52 in South Africa compared to the ratio of 1 to 10 in developed countries. Young South Africans believe less in themselves as business starters compared with similar developing countries such as Argentina, India, Brazil and Mexico (Nicolaidis, 2011:1043). The government has to create jobs and generate sustainable and equitable growth by supporting small, medium and micro enterprises (Herrington, Kew, and Kew, 2010:12).

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 the learners themselves. One of South Africa's greatest limitations

to economic development can be ascribed to its lack of entrepreneurs (Isaacs, et al., 2007:613). Maas and Herrington (2008), as cited by Steenekamp, Van der Merwe and Athayde (2011:49), said that youth unemployment constitutes 70% of total unemployment and that two-thirds of the South African population between 18 and 35 years are unemployed. Lewis (2002), as cited by Isaacs et al., (2007:613), reported 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.

Orford, et al., (2004), as cited by Leffler, Svedberg and Botha (2010:313), said that research suggests that entrepreneurship education in schools can have a significantly positive influence on the four areas crucial to entrepreneurship which are:

- Learners' self-confidence about their ability to start a business;
- Learners' understanding of financial and business issues;
- Learners' desire to start their own business; and
- Learners' desire to undertake higher education.

2.10.2 The development of entrepreneurship education in South Africa

Many high school students have now begun to see entrepreneurship as a potential career choice. The government has fortunately recognised the vital contribution that entrepreneurs can play in the economic development and social upliftment of the nation. The vital component of the government's ten year vision of the Accelerated and Shared Growth Initiative is for the nation to become entrepreneurial in orientation. If South Africa is to meet and sustain the material needs of its entire people, it is imperative that the government develops a spirit of enterprise in which entrepreneurial ventures are acceptable and worthy of support (Nicolaidis, 2011:1045).

Botha (2009), as cited by Leffler, Svedberg and Botha (2010: 312), emphasised that there is a growing need for entrepreneurship education and training programmes in South Africa. Currently there is disparity in the content and quality of entrepreneurship education programmes on offer, including curriculum designs, delivery methods and forms of assessment. If entrepreneurship

education is really to be embedded in the education system, then it must be reflected in the culture of the education institutions, the organisation of the classroom and the ability of the teacher. The challenge is to allow young people to experience and feel the concept rather than just learn about it in the conventional sense (Gibb, 2007:8).

Introducing entrepreneurship into the curriculum in any institution will almost certainly mean building upon existing education/industry/community links and related programmes. The decisions about what should be included and at which level follow from consideration of the desired outcomes, the needs of different groups and priorities, the dictates of the existing curriculum, notions of progression and the degree to which entrepreneurship training is regarded as an extra-curricular activity rather than as an intrinsic part of the school curriculum (Gibb, 2007:10).

The new entrepreneurship teaching style should be action-oriented to encourage experiential learning, problem-solving and creativity and provide the best mix of enterprising skills and behaviours needed to create and manage a business. Researchers also suggest there should be increased use of more interactive methods such as role-playing and simulation for students to practise analytical and decision-making skills (www.weform.org 18 May 2012). There is a shortage of entrepreneurship educators and the current pool needs to be expanded. Entrepreneurs and others with entrepreneurial experience should be allowed and encouraged to link with local schools and so share their knowledge. They not only provide great value in the classroom but also enhance entrepreneurial spirit within the institution overall and create stronger links with the local community and ecosystem (www.weform.org 18 May 2012).

Entrepreneurship education can promote business start-up on at least three levels: firstly, by changing the attitudes of the students and directing them towards certain career choices; secondly, their intentions about entrepreneurship changes as reflected in their behaviour; thirdly, at the practical level where it increases the propensity of students to start a business (Steenekamp, Van der Merwe and Athayde, 2011:51).

The use of active learning methods is more complex than traditional teaching methods because they engage student's feelings and emotions in the learning process and develop the creativity, innovation and critical thinking skills of individuals. Educators/facilitators must be able to create an open environment of trust in which students develop the necessary confidence to take risks by learning from experience with both successes and failures. The proper incentives, assessments, rewards and recognition must be put in place to encourage educators to try these approaches (www.weforum.org 18 May 2012).

In order to measure success in imparting entrepreneurial skills, the learning outcomes should show readiness in learners to start their own businesses. Research on developing visioning and creativity revealed that if competencies are not stated explicitly as learning outcomes and included in assessment criteria, they will not be fully addressed by students. Educators should expect similar things to hold for entrepreneurship skills (Frank, 2007:644).

2.10.3 The current state of entrepreneurship education in South Africa

Entrepreneurship is included in the Revised National Curriculum Statement 2005, as one of the learning areas under the heading Economic and Management Sciences. The curriculum stresses a more active or action learning approach to incorporate not only knowledge and skill but also values, attitudes and previous experience in order to change behaviour and involve learners in their own learning (Nieuwenhuizen and Groenewald, 2008:132). Entrepreneurship education should be encouraged at primary school level as learner's self-confidence about their ability to start a business later in life is built on such education (Nicolaidis, 2011:1045).

Entrepreneurship education forms part of Business studies (which is an optional subject) for grades 10 to 12. The teacher training curriculum plays an important role in implementing entrepreneurship in schools. At the primary school level teachers are supposed to teach basic entrepreneurial skills, but the emphasis seems to be on the economic approach (Leffler, Svedberg and Botha, 2010:315).

Entrepreneurship educators must practice the new interactive and innovative approaches. The creation of new venture plans, case studies and guest speakers

are the most employed in-class methods. Pedagogies applied outside the classroom include consultation with practising entrepreneurs, interviews with entrepreneurs, field trips, internships and cooperative education opportunities with actual entrepreneurs and student entrepreneurship clubs (Plumy, Marshall, Eastman, Iyer, Stanley and Boatwright, 2008:20). The curriculum at school level as well as in the higher education system needs to be transformed in order to make entrepreneurship one of the most important subjects to be taught. Entrepreneurship should be a separate stand-alone subject and not viewed simply as part of Business Management (Nicolaides, 2011:1046).

North (2002), as cited by Steenekamp, Van der Merwe and Athayde (2011: 53), said that care should be exercised to prevent entrepreneurship education from becoming yet another activity where predominantly theoretical knowledge is acquired. Entrepreneurship education and training at school must fulfil the primary role of instilling relevant academic, business and positive life-long skills to prepare the youth to contribute towards economic growth.

Taylor, Jones and Boles (2004), as cited by Nieuwenhuizen and Groenewald (2008: 131), are of the opinion that action learning is an appropriate method for responding to the problem-centred needs of would-be entrepreneurs because it engenders a personal, situational and emergent process in which groups of equals are encouraged to develop a critical questioning approach to solving their problems.

In order to understand and broaden the knowledge base on the extent to which entrepreneurship is being implemented in school curricula, the information from the respective Departments of Education in the nine provinces was accessed through a literature review. The 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. The 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. Rural schools represented 41% and urban schools 59 % of the sample. The findings were that in almost 60% of the schools, no entrepreneurship training programmes were

offered in any of the nine provinces. In the Eastern Cape, the three rural schools sampled offered no entrepreneurship education and of the six urban schools sampled; only three offered entrepreneurship education (Isaacs et al., 2007:620).

2.10.4 Entrepreneurship programmes in South Africa

Youth Enterprise Society (YES) Programme

The YES Programme's mission is to help young South Africans become job creators rather than simply job seekers. It is a multiracial school programme based on the concept learning by doing for Grade 9 to Grade 11 learners and involves all communities, including local business people, trade union representatives and educationalists. The aim of the programme is to create awareness and interest in free market entrepreneurship as a career option amongst young people. After meeting certain requirements, interested parties form a Local Partnership which initiates YES Societies at one or more schools in their area. Students are invited to join by their peers and each YES Society involves three to six trained teachers who act as YES Advisors and 45 students, broken down into three teams of 15 learners in each grade. The teachers act purely as facilitators and as a link to the Local Partnership which judges and evaluates the students' progress. The programme runs for three years and focuses on developing skills in life skills and understanding the market economy. In the YES programme, teachers and students are supported in their entrepreneurship activities by pedagogical teams established either in the locality between different partners or at the school level (Smith and Salazar-Xirinachs, 2006:118).

Business simulation activities

Some of South Africa's schools are involved in the Johannesburg Liberty Challenge game which teaches learners the buying and selling of shares under simulated conditions. The aim of business simulation and practise enterprises is to put students in the situation of an entrepreneur and make them aware of the risks that are faced by entrepreneurs in making their businesses a success. The research done by United Nations Educational, Scientific and Cultural Organisation and International Labour Office show that when students work

together in a practise enterprise they become responsible for the enterprise's success, which gives them a stake in the learning process as well as securing their commitment and participation(Smith and Salazar-Xirinachs, 2006:49). The projects also provide an opportunity for learners to apply maths, science, technology and language in a real world context (Smith and Salazar-Xirinachs, 2006:49).

The Ministry of Labour sent a formal request to receive technical support from the ILO in order to introduce the Know about Business Programme in the national education and training system. A pilot project proposal was formulated targeting secondary education and technical and vocational education and training in the Gauteng province (De Rezende and Christensen, 2009:48).

The current study will investigate the effectiveness of entrepreneurship education in the FET phase in stimulating entrepreneurship interest. Due to time constraints and course requirements, the investigation in the current study will be limited to the twelve Motherwell secondary schools in the Nelson Mandela Metropole Municipality.

2.11 SOUTH AFRICA CAN LEARN FROM GLOBAL TRENDS IN ENTREPRENEURSHIP EDUCATION

2.11.1 Lessons to be learnt from Canada

Around the world, entrepreneurship and enterprise education is beginning to take hold and various programmes have been implemented to build more entrepreneurial approaches around existing education, business and industry (Gibb, 2007:11).

The centre for entrepreneurship education and development in Canada teaches students not only to earn academic credits through self-directed study but also to develop the personal qualities, characteristics, attitudes and skills needed to be successful in the workplace. It allows learners to learn how to start and operate a business outside the traditional classroom and learners achieve high school credits while being engaged in entrepreneurial activities (Smith and Salazar-Xirinachs, 2006:92).

In Canada the non-profit organisations such as the Dobson Foundation and Fraser Institute are involved in entrepreneurship education programmes in schools (Cowley, 2007:14). There are also yearly competitions celebrating the best entrepreneurship activities in secondary schools and this encourages active participation of learners as they compete to win prizes.

2.11.2 Lessons to be learnt from China

South Africa can learn a lot from China because they both moved to industrialised economies in 2011 (www.en.wikipedia.org 12 April 2012). China, as an innovative country, introduced three models of entrepreneurship education. These models are Personal Quality Development Approach, Business Venture Skills Development and Awareness Raising and Skills Development Approach. Some of the key drivers for the development of entrepreneurship education were the rapid development in rural areas and rural enterprises and the demand for management programmes to ensure better management of millions of firms (Jamaludin, 2011:5). The teaching strategies include workshops with students, running business competitions, using case studies, project learning and mentoring programmes (Cheung, 2008:507).

Entrepreneurship programmes such as The Bright China Foundation operate its own schools and deploys its own teachers and also works with teachers in the public school system (www.weforum.org 18 May 2012). The Know about Business Programme uses interactive and participatory teaching methods which aim to develop entrepreneurial skills, attitudes and mind-set of learners. This programme motivates youth to consider and explore the option of being an entrepreneur and to provide practical and essential information about opportunities and challenges needed for entrepreneurship (De Rezende and Christensen, 2009:12).

2.11.3 Lessons to be learnt from Hong Kong

The education reform which tries to narrow the gap between the educational system and the workplace aims to help pupils understand a variety of issues concerning diversity, globalisation, information technology, business ethics and responsibility so as to face the new challenges of today's business world

(Cheung, 2008:18). Statistics show that there is high percentage of people who would like to set up their own businesses. The government of Hong Kong is very supportive and has extended help to these small businesses in the initial stages of their ventures (Cheung, 2008:19).

The operation of a kiosk before the Chinese New Year by pupils from different schools is a good opportunity to teach entrepreneurship education. This teaches learners the responsibility and commitment because entrepreneurial skills are acquired by experiential learning (Cheung, 2008:21). It is important that schools who participate in the activity be awarded by organising prize giving ceremonies that will encourage more learners to participate. Entrepreneurship education is a priority to young people in an economy where unstable jobs, contract work and unemployment are the norm (Cheung, 2008:19). The non-profit organisations are involved in entrepreneurship education by organising business plan competitions for learners in secondary schools.

2.11.4 Lessons to be learnt from Hungary

The Hungarian government realised that entrepreneurship education cannot be effective without the various programmes implemented in countries like USA, Hong Kong and Canada. They established two successful international programmes, the Junior Achievement and Young Enterprise. These programmes organise school programmes where students create and run mini-companies during one school year. These are real enterprises operating in a protected environment, producing and selling real products and services. The students learn under simulated conditions the preconditions of running a successful enterprise and have various roles as managing director, manager of sales, marketing account manager, accountant according to the organisation of the firm. These programmes provide the students with practical business knowledge (Csapo and Pethoe, 2006:3).

2.11.5 Lessons to be learnt from India

The introduction of elementary education to ensure that each child is fully developed in human personality and citizenship has also laid the foundation for employability. India believed that these core skills should be part of each child

leaving the school (Vaidya, 2007:2). The curricula for India provides children with opportunities to participate in social and economic activities inside and outside the classroom and are neither confined to the four walls of the school nor provided by the teacher alone. Programmes are planned and implemented so that the local community, community development, organisations and government agencies participate in them and cooperate with the school (Vaidya, 2007:3).

The Entrepreneurship Development Institute organises summer camps during vacations where school children are introduced to activities that promote the spirit of entrepreneurship in them. The Central Board of Secondary Education introduced a separate course on “Entrepreneurship” at the senior secondary stage to empower them to be productive and self-reliant individuals with initiative and resourcefulness (Vaidya, 2007:5).

I Create is a non-profit organisation dedicated to providing integrated entrepreneurship training to the disadvantaged communities in rural and urban areas in India. Wipro Mission Education provides training programmes for teachers and school leaders (Kee, et al., 2008:18).

2.11.6 Lessons to be learnt from the New Zealand approach

The Education for Enterprise provides learning experiences that encourage young people to be active participants in their learning by giving the learners opportunities to engage with local businesses and community on real projects (www.nfte.com 15 April 2012). The Lion Foundation Young Enterprise Scheme (YES) provides opportunities for students to form a company, become directors and develop products and services. YES is school based and teaches skills in budgeting, planning, interpersonal relations, decision making, reporting, communications, risk management and teamwork (Youth Parliament, 2010:5). Partnership with parties outside the school is crucial to the success of entrepreneurship education. The teaching and learning process is directed towards developing those skills, competencies, understandings and attributes which equip young people to be innovative. Students who manage themselves are enterprising, resourceful, reliable and resilient (Youth Parliament, 2010:4).

2.11.7 Lessons to be learnt from USA

Despite many challenges facing the USA such as high school drop-out rates, workforce readiness and economic competitiveness, it remains one of the world's most innovative and entrepreneurial societies (www.nfte.com 15 April 2012). Entrepreneurship education helps to instil an entrepreneurial mind-set which is a critical mix of success-oriented attitudes of initiative, intelligent risk-taking, collaboration and opportunity recognition. This mind-set is one of the real secrets of America's prosperity as it helps drive the creativity and innovation of workers, companies and entrepreneurs. They nurture an entrepreneurial mind-set via widespread use of youth entrepreneurship programmes which are part of their education system (www.nfte.com 15 April 2012).

The commitment of government, academic institutions and non-governmental institutions is impressive. In the USA, three groups drive the development and promotion of entrepreneurship education programmes namely government, academic institutions and non-profit institutions (Pena et al., 2010:7). The federal government is able to improve entrepreneurship education programmes by creating a national system for accreditation and certification. The Kauffman Foundation's Scholar Programme and the National Foundation for Teaching Entrepreneurship (NFTE) offer an entrepreneurship educator's certification and career development opportunities (Pena, et al., 2010: 25). Entrepreneurship education can be enhanced by creating professional development opportunities for teachers that will equip them to teach better. NFTE develops curricula, trains teachers and provides on-going support for NFTE classes in schools (Kee, et al., 2008:16).

Some programmes target students with a history of poor attendance and low marks in tests and also bring the real world to students. The learners are given an opportunity to own businesses and this give them reason to learn (Smith and Salazar-Xirinachs, 2006:102).

Effective entrepreneurship education programmes engage local entrepreneurs as mentors, coaches, speakers and role models. Partnerships with local business organisations, such as Chambers of Commerce, Small Business Development Centres, Entrepreneur's Organisation or local civic clubs, such as a Rotary, are

also an integral component of entrepreneurship education (www.nfte.com 15 April 2012).

2.12 REQUIREMENTS FOR SUCCESSFUL YOUTH ENTREPRENEURSHIP EDUCATION IN SOUTH AFRICA

Entrepreneurship education should be integrated into mainstream curricula. Among the groups advocating for the inclusion of youth entrepreneurship within national and local curricula are Youth Business International, Junior Achievement, the National Foundation for Teaching Entrepreneurship, the Consortium for Entrepreneurship Education (USA), the Youth Entrepreneurship Strategy Group, the Know About Business programme of the International Labour Organisation, Imagine Nations and The YES Fund. The integration at national level requires a careful allocation of class and teacher time and entrepreneurship education curricula that are well-mapped to the existing syllabus. This can be achieved by working hand-in-hand with the Minister of Education, by training teachers and by recruiting volunteers from the business community (www.weforum.org 18 May 2012).

Entrepreneurship education needs teachers who are able to engage young people in the necessary experiential activities. Teachers may need training in either or both the experiential pedagogy and the business content. Teacher colleges will need to include entrepreneurship in the basic curriculum for aspiring educators and they will need to partner with the business and law schools on this topic. No entrepreneurship programme can succeed without close interaction with entrepreneurs and developing materials for entrepreneurs and other business people who will work with the programmes. The curriculum for most successful youth entrepreneurship programmes includes:

- Simulations and games;
- Interactive teamwork and group activities;
- Direct, action-oriented market research (students recognise market opportunities by observing and interviewing potential customers, and by identifying needs in their own communities);

- Student buying and selling events, using real money grants or loans from the school or programme;
- Field trips to local businesses, especially entrepreneurial ventures;
- Entrepreneurs or venture funders as guest speakers in class;
- Business plans and other competitions, with business people as judges; and
- Student-run businesses, using real money (including in-school stores) (www.weforum.org 18 May 2012).

Students should read and write about great entrepreneurs of the past and present as part of any entrepreneurship course. The stories of young entrepreneurs and entrepreneurs from poor or marginalised backgrounds may be especially inspirational. Around the world, entrepreneurship and enterprise education is becoming important as shown by programmes implemented in the various countries. There is therefore potential, worldwide to build more entrepreneurial approaches around existing education, business and industry (Gibb, 2007:11).

Entrepreneurship education is a lifelong learning process, starting as early as elementary school and progressing through all levels of education, including adult education. The Standards and their supporting Performance Indicators is the framework for teachers to use in building appropriate objectives, learning activities and assessments for their target audience. Using this framework, students will be able to develop the insight needed to discover and create entrepreneurial opportunities and expertise to successfully start and manage their own businesses (Ramanigopal, Palaniappan and Hemalatha, 2012:250).

The places of learning should be the catalysts of entrepreneurial motivation and should drive it forward as a viable alternative to working for someone else. Teaching should be facilitated to maximise the potential of individual students and to encourage a sense of curiosity and motivation in them and learners should become alert and aware of opportunities (Nicolaidis, 2011:1048).

2.13 SUMMARY

South Africa's effort to stimulate and encourage public and private sector collaboration as a means to accelerate growth and to enable entrepreneurs is reported to be lagging significantly behind many comparable countries. The reasons cited for this poor performance were:

- The economic retraction in 2009 which had a considerable negative impact on the entrepreneurial sector where total entrepreneurial activity dropped to only 5%;
- The lack of respect and recognition of entrepreneurial activity to the South African Gross Domestic Product (GDP);
- The lack of response for initiatives to encourage entrepreneurial activities;
- The fragmented nature of programmes which result in limited overall impact;
- The lack of support from the country's financial and operating environment especially the regulatory institutions;
- Policies and access to capital for entrepreneurs particularly for small business owners; and
- Lack of women entrepreneurs who have a passion for the business, to see it grow and succeed (www.ideas.repec.org, Accessed 08 June 2012).

South Africa can learn a lot from India because it is one of the world's fastest growing economies and ranks 39th in innovation ahead of several advanced economies. On potential entrepreneurial activity, India scored 52% compared to other BRICS countries like China 17%, Russia 4% and Brazil 25%. The planned intervention in fostering entrepreneurship through training, teaching and research has helped India to grow faster. India is also offering entrepreneurship training to the disadvantaged communities in both rural and urban areas.

South Africa can also benchmark the mentoring programmes and The Know about Business programme from China. China has introduced entrepreneurship education into the secondary school curriculum and South Africa can learn from this. India and China are major sources of scientific and technological talent.

South Africa can learn a lot from the USA on how to get the commitment of government, academic institutions and non-governmental institutions. The partnering with local businesses can be encouraged in South Africa. The entrepreneurship programmes which target students with low marks and a history of poor attendance can be benchmarked from the USA. The active involvement of learners in running businesses under simulated conditions is done by various developing and developed countries.

The new entrepreneurship teaching style in South Africa should be action-oriented to encourage experiential learning, problem solving and creativity and to provide the best mix of enterprising skills and behaviours needed to create and manage a business. There should be increased use of more interactive methods such as role playing and simulation for students to practise analytical and decision making skills. In the classroom, pupils are expected to have and should be given opportunities to take initiatives, look for solutions and be proactive in their learning (Leffler, Svedberg and Botha, 2010:313).

The South African education curriculum at school level as well as at higher level needs to be transformed to make entrepreneurship one of the most important subjects that should be taught (Nicolaidis 2011:1046). The World Entrepreneurship Forum Global Education Initiative report (WEF, 2009), as cited by Martinez, et al., (2010:12), indicates that changing existing school systems will take time. The multi-disciplinary business content and experiential approaches will need to be integrated into the basic training that teachers receive.

For the past 22 years the Consortium for Entrepreneurship Education has provided leadership to those who teach our youth and adults about their country, their career opportunities and the skills needed to be successful. Educators have created programmes and activities to provide students with the experiences that nurture the spirit of entrepreneurship everywhere (Ramanigopal, Palaniappan and Hemalatha, 2012:255).

Around the world, entrepreneurship and enterprise education programmes are implemented with the USA leading in innovative approaches. There is therefore the potential worldwide to build more entrepreneurial approaches around existing education, business and industry initiatives (Gibb 2007:11).

Even though the different countries have different approaches to entrepreneurship education, the common trends that could be identified to serve as benchmark for South Africa are:

- A practical approach of linking theory with the outside world by networking with local businesses;
- The commitment of government to provide funds and to implement policies that guide schools in the implementation of entrepreneurship education programmes;
- The development through in-service training of educators so as to improve the quality of entrepreneurship education programmes.

Chapter 3 provides an outline of the research methodology followed in the study

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The previous chapter provided a literature review of the various entrepreneurship programmes offered in a number of countries and the state of entrepreneurship in South Africa. In South Africa, there is high rate of unemployment especially among the youth. The figures for youth unemployment in 2012 were 51, 6 % and the majority of the youth are not economically active because they are either studying or busy with household chores (www.businesslive.co.za: 8 May 2012).

One of the main inhibitors to entrepreneurial activity in South African schools, especially in previously disadvantaged communities, is that the schools are not preparing school leavers with the required skills for entrepreneurship (Herrington, Kew and Kew 2010:46). Research shows that this problem is experienced in many countries and entrepreneurship education has been introduced as an option to improve the employability of learners exiting from schools (Martinez et al., 2010: 19).

Learners need to be exposed to relevant outcome-based entrepreneurship programmes by qualified and enthusiastic educators (Horn 2006:127). The learners need to be exposed to risks, rewards and critical thinking skills in order to raise their entrepreneurship potential. Entrepreneurship worldwide is considered important in getting the young people involved in the economy. The low role of entrepreneurship in South Africa leads to the question of whether it is due to our education system since 70% of high school students are interested in starting their own businesses but 80% reported they were taught little or nothing about how a business works (Isaacs et al., 2007:613).

Opportunity entrepreneurship is more likely to be followed by people with matriculation certificates than those without such certificates. The Global Monitor Report (2003), as cited by Lazenby and Machaba (2011:74), said that it is thus important to give learners a good foundation of entrepreneurship while still at secondary school level so as to be able to acquire the necessary skills for new venture creation.

Across nations, there is a need for programmes that show young people how to directly contribute to raising levels of well-being and prosperity in their communities. The learners need to be prepared for the world of work whilst they are still at secondary school level. The preparation for new venture creation starts in the classroom where students, future workers, business owners and community members learn how to be responsible citizens (Smith and Salazar-Xirinachs 2006:2).

There is still a problem worldwide in establishing entrepreneurship education programmes that are effective because some countries focus on narrowly defined tools such as how to start up a business, financial and human resources. According to the European Commission (2006) as cited by Evaluation of Programmes Concerning Education for Entrepreneurship (2009:14), *“entrepreneurship is a dynamic and social process where individuals alone or in collaboration, identify opportunities for innovation and act upon these by transforming ideas into practical and targeted activities, whether in a social, cultural or economic context”*.

The early formal entrepreneurship education affects the attitudes of students, which in turn directs them towards certain future careers and encourages entrepreneurship. The attitude of learners in entrepreneurship as a possible career needs to be developed at the primary and secondary school levels. The entrepreneurial intentions can be promoted through education and the content and teaching methods have to be conducive to targeted and effective learning (Steenekamp, Van der Merwe and Athayde, 2011:50). The Department of Education, supported by the Department of Trade and Industry, must make sure that schools provide young people with the knowledge and skills that foster an entrepreneurial culture. There must be mentorship programmes offered to learners by government and private sector. The future of our economy and worldwide will depend largely on our ability to develop and encourage the creative talents of our learners. In the past, learners believed in studying a career that would enable them to find a secure job because of avoiding failure in starting a business (Herrington, Kew and Kew 2010:47).

The current study aims to investigate whether the entrepreneurship education programmes introduced in the secondary schools provide school leavers with the required knowledge and skills to establish their own businesses. Lazenby and Machaba (2011: 74) believe that the schooling process discourages creativity because learners are indoctrinated to follow certain rules. According to Horn (2006: 121) entrepreneurship was introduced to Grade 10, 11 and 12 as part of the subject Business Studies (which is optional) from 2005 but there were no compulsory entrepreneurship education programmes in schools. The reasons were that there were no qualified teachers to teach entrepreneurship and no suitable supporting materials.

The teacher training institutions in South Africa have not responded well to the importance of integrating entrepreneurship education in their curricula. Educators need to be trained in order to teach learners entrepreneurial skills at school level. It is important that educators involve businesses in providing education and training and also to act as role models to learners (Isaacs et al., 2007:627).

The focus of the study will be on the educators who are teaching commercial subjects in grades 10 to 12 in schools in the Motherwell Township of the Nelson Mandela Metropole Municipality. This study will assess the current entrepreneurship education programmes offered at secondary schools in Grade 10-12 levels in Motherwell. The Global Monitor Report (2010) shows that entrepreneurship education and training in schools has been low since 2000. Although Government introduced a new curriculum in 2005 to encourage entrepreneurial and business training amongst the youth, practical learning about the business has not been successful and thus the standard of the matriculation pass rate has been declining (Herrington, Kew and Kew 2010:50).

The study will aim to provide recommendations on how to improve the current entrepreneurship education programmes at secondary school level so as to develop entrepreneurial skills and talents among the learners. This chapter will provide an explanation of the research methodology followed to achieve the primary objective of the study.

3.2 THE RESEARCH PARADIGM

The researcher has to be guided by a specific method in order to carry out the research successfully. A paradigm is the worldview that guides how research should be conducted based on assumptions and philosophies of people about the information needed. It acts as a map for researchers to find information about the particular aspect in the subject area to be researched (Kirkwood and Campbell-Hunt, 2007:221).

3.2.1 Quantitative versus qualitative

It is important to understand the research paradigm and be able to choose the one relevant to your study in order to conduct research successfully. The research paradigm is a framework that guides the researcher when conducting scientific research. Collis and Hussey (2009:56) identify two main research paradigms or philosophies, namely the positivism (quantitative) and interpretivism (qualitative) paradigms. The positivism (quantitative) approach assumes that the reality is singular and objective, and is not affected by the act of investigation. The researcher does not study individual human beings but rather seeks to identify relationships between variables that explain behaviours. Quantitative research strives to use valid and reliable methods to describe, predict and control human behaviour. The researcher plans the study in great detail before the start of the research process, including the design of the data collection instruments, data collection process and management methodologies and data analysis (Borland 2001: 9).

In a quantitative approach the questions about the how and why of respondents' perceptions are much less common although they are likely to be of greater interest to a range of parties (Brand, 2008:431). A typical quantitative approach starts with a numeric definition which is likely to be based on the findings of a large-scale socio-economic survey. The researcher is assumed to be separate from reality and any data collected and statistical analysis is believed to be truly measuring reality. The results can be reproduced in another experiment (Blumberg et al., 2005:125).

The purpose of quantitative research is to be able to project the findings to the larger population through objectively using the data collected from the sample. The results are interpreted to determine the probability of being repeated to a larger population (Borrego, Douglas and Amelink, 2009:54). It involves the collection of numerical data and analysing it via statistical methods. Descriptive statistics help the researcher in presenting the information in a compact format like tables, charts or graphs. Quantitative methods are used when a theory is already well developed and needs to be confirmed (Borland, 2001:10).

Interpretivism (qualitative research) believes that social reality is not objective but highly subjective because it is shaped by our perceptions. The researcher and reality are inseparable. The researcher interacts with that which is being researched because it is impossible to separate what exists in the social world from what is in the researcher's mind (Collis and Hussey, 2009:57). Within the qualitative research paradigm, it is not only impossible to establish absolute truth, but relative truth is also bounded by the point in time and place in which it is observed as well as the perceptions of respondents, researcher, peer reviewer and consumer of the research. It seeks to describe much detail about a few selected individuals and can be used to formally develop theories and models to be tested via quantitative research (Borland, 2001:8). In a quantitative approach, mostly closed questions and some open ended questions are used.

The data that are collected are open to criticism as the researcher analyses his/her subjectivity. The researcher has to plan the research design structure in such a way that they do not interfere with the process and increase the levels of truth and decrease subjectivity. In qualitative approach, the open-ended, particularly in-depth, questioning offers the possibility that respondents will answer questions using their own words and not be guided by the researcher (Brand, 2008:431). The qualitative approach does not use large-scale survey to learn about something but bases its findings on observations or deeper and less structured interviews (Blumberg et al., 2005:125).

The main aim of qualitative research methods is to understand human beings and their behaviours and grasp the phenomena from the views of the participants in the study. They rely on experience and knowledge of the researcher for

analysis. Researchers may use case studies, action research and ethnographic research. They look for a sample of participants who share common insight about the phenomena under study. They may approach a certain group of people who share a common experience and sample those who are willing and able to answer questions about their experiences. This research method is best used when research is conducted on human behaviour or in educational research. The selection of research method which is appropriate for the study depends on the research question to be addressed (Toloie-Eshlaghy, Chitsaz, Karimian and Charkhchi, 2011:107).

The comparison of the research paradigms is indicated in Table 3.1

Table 3.1: COMPARISON OF RESEARCH PARADIGMS

Philosophical assumption	Positivism	Interpretivism
Ontology	Reality is understandable, objective and separate from researcher	There are multiple realities which are subjective and depend on the participants' views
Epistemology	Researcher is independent and objective and collects observable and measurable data	Researcher interacts with what is researched and the beliefs determine what counts as facts
Methodology	Quantitative research uses large samples and formulates and tests hypotheses	Qualitative research uses small samples and looks for patterns to be repeated
Research purpose	Determining, predicting and controlling	Perceiving and reproducing

Source: Collis and Hussey, (2009:58)

The research objective of the present study is to assess the current entrepreneurship education programmes offered at secondary schools in the

Grade 10-12 levels in Motherwell. The aim is to determine why school leavers lack the entrepreneurial initiatives to start their own business. The mixed approach will be used in the study because the researcher aims to assess whether the educators are imparting knowledge to learners about the concepts under study and produce findings. The concepts that have an effect on entrepreneurship education will be investigated and, using descriptive statistics, data will be summarised in a more compact form and presented in figures and tables.

3.2.2 Justification for the chosen paradigm

The primary objective of the current study questions whether the current content and entrepreneurship programmes in the Grade 10-12 learners manages to develop entrepreneurship skills and knowledge.

The quantitative data will be analysed using descriptive statistics. Qualitative findings will be compared to quantitative findings to ensure triangulation. Triangulation involves the use of multiple methods so as to reduce bias in data sources, methods and investigators (Collis and Hussey, 2009:85).

The dominant paradigm will be quantitative because the research involves a deductive process which aims to provide theories to better understand the social phenomenon. The issues will not be investigated in greater depth and thus the researcher will get the views of educators at Motherwell senior secondary schools about entrepreneurship education programmes.

The researcher will interact and deal with educators in their schools and assess their perceptions about entrepreneurship education programmes. The researcher has identified the concepts to be assessed and will pose the questions based on this, collect the data and interpret the results. The researcher has to define the concepts to be investigated before creating instruments to record the data of the individuals to be studied.

The researcher decided on a mixed approach because the knowledge concerning various concepts that have an effect on entrepreneurship education will be assessed. The researcher has planned the study, including the design of the data collection instruments, data collection and management methodologies

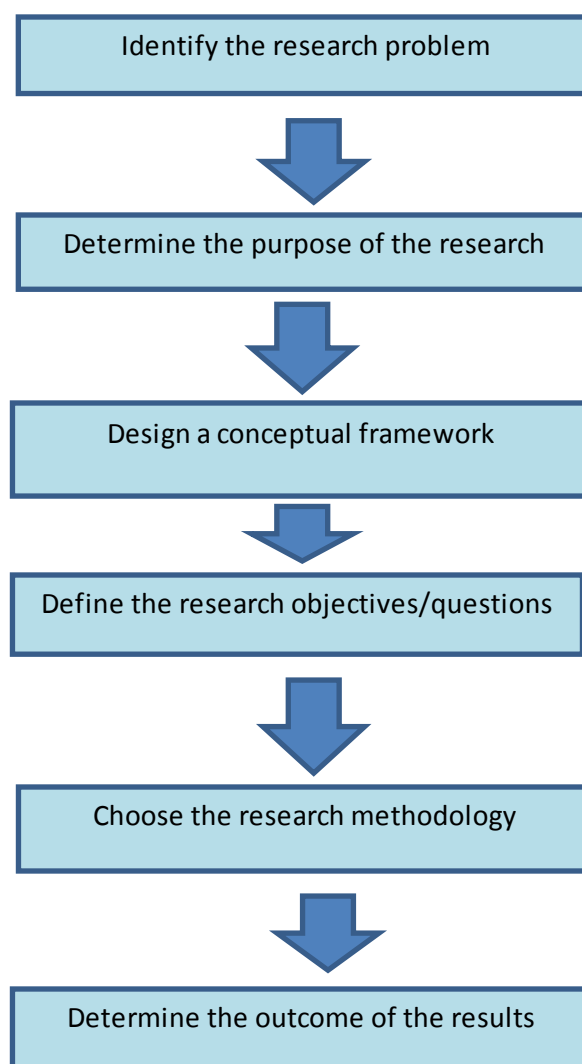
and data analysis in great detail before the start of the research process (Borland, 2001:9). The information from previous research will guide the design. The positivism permits the anticipation of phenomena, predicts the occurrence and allows it to be controlled (Collis and Hussey, 2009: 56). The sample selected for the study is large enough to infer to the population under study within a predetermined level. The current study focuses on real phenomena of whether entrepreneurial skills and knowledge are developed in the secondary schools to school leavers. Both quantitative and qualitative data will be used in the study. The purpose of collecting qualitative data is to collect information that will be summarised to confirm the quantitative findings.

The qualitative approach is primarily descriptive and seeks to describe much detail about a few selected individuals. The researcher is involved with what is being researched and has values which determine what is recognised as facts and the interpretations drawn from them. The mixed approach will allow the researcher to select facts by looking at the current entrepreneurship education programmes and identify problems encountered. The quantitative approach is primarily using descriptive causal-comparative research in order to identify reasons or causes for the current phenomenon under study. A statistical analysis of the data will be done to assess the effectiveness of the current entrepreneurship programmes offered at secondary schools.

3.3 RESEARCH DESIGN

Research design, according to Collis and Hussey (2009:111) is the art of planning the procedure that the research will follow so as to get the most valid findings. Research has to be structured in order to produce results that are useful in increasing knowledge as illustrated in Figure 3.1 (Collis and Hussey 2009:112).

FIGURE 3.1: OVERVIEW OF RESEARCH DESIGN



Source: Collis and Hussey 2009:112

The researcher used the mixed approach with the dominant paradigm being quantitative and the specific research method was the descriptive survey research approach. The purpose of a descriptive survey research is to investigate participants' views on a certain issue. The researcher aims to investigate the views of educators concerning entrepreneurship education.

According to Collis and Hussey (2009:77) a survey is a method that is designed to collect primary or secondary data from a sample, with a view to generalising the results. In this study, entrepreneurship education programmes that are

offered in the twelve secondary schools of Motherwell to Grade 10-12 learners will be the focus of the study. The researcher will use multiple methods for collecting data, which may be both qualitative and quantitative. The information will be collected in the twelve Motherwell secondary schools.

A structured questionnaire will be designed and used to collect data so as to be able to ask the same questions to all participants. According to epistemological assumption, the positivism researcher is objective and does not interact with that which is being researched. Questionnaires will be given to teachers to assess the current entrepreneurship education content and programmes' effectiveness in developing skills and knowledge to school leavers.

This study seeks to improve the current entrepreneurship education programmes offered in secondary schools to be effective in developing entrepreneurial knowledge and skills. The questionnaires will be given to teachers and will help assess the current entrepreneurship education and whether it addresses some of the stages to be developed in learners while still in secondary schools.

Triangulation involves the use of multiple methods of measurement to assemble information on a phenomenon with the aim of improving the validity of measurement (Kirkwood and Campbell-Hunt, 2007:224). Triangulation will be used in this study because the researcher will compare responses from various schools with the information collected from the literature review and will then present the findings.

3.4 STUDY POPULATION AND SAMPLING

A sample is a subset of the population and in positivism the sample should represent the population from which it is drawn in order to make generalisations (Collis and Hussey, 2007:62). A sample size is related to the size of the population and the mixed approach conducts the research on the sample because the goal is to gain rich and detailed insights on the complexity of the phenomena. The approach that will be used in sampling will be to survey according to clusters. The purpose is to get information from all the secondary schools of Motherwell. The sample is representative of the population from which it is drawn. The population of the current study would be all the people who are

part of the entrepreneurship education programmes offered in Grade 10-12 level in the Nelson Mandela Metro pole Municipality. This includes teachers and the Department of Education.

The aim of the study is establish whether the current entrepreneurship programmes in the FET (Grade 10-12) develop entrepreneurship skills and knowledge among the school leavers. The educators in the twelve Motherwell secondary schools will be used for the study. The subject advisor for Business Studies in the Department of Education will also be used for the study. The focus will be on the educators in the Motherwell area of the Nelson Mandela Metropole Municipality. The Motherwell area in Nelson Mandela Municipality is a fast growing area near the Coega Development area.

Motherwell is divided into 16 neighbourhood units referred to as NU 1 to 12 and NU 29, and includes the neighbourhoods known as Ramaposa, Ikamvelihle and Steve Tshwete Village. Motherwell was chosen to be one of the Urban Renewal Programme nodes. The broad objectives of the programme were to alleviate poverty, develop human resource and enterprise and strengthen crime prevention. There are many projects that have been completed but most of the learners in this area are not able to benefit because of the lack of entrepreneurship skills and knowledge (www.nelsonmandelabay.gov.za 18 June 2012). Most learners in this area are not motivated and encouraged to attend schools every day because of the lack of practical educational programmes that encourage innovation and also those who pass Grade 12 are not fully prepared to enter the job market.

The sampling methods can be random or non-random. In random sampling every member of population has a chance of being selected. It is thus an unbiased subset of the population and the results can be generalised to the whole population (Evans, 2010:144). A non-random sample can be used for interpretivist studies where a small sample is used and generalisation is not the aim of the study. The present study uses random sample and cluster sampling has been selected because every member belonging to the selected group has been given a questionnaire.

The schools are divided according to clusters and all the secondary schools of Motherwell were approached to participate in the study. Twelve schools from a population of 120 secondary schools registered with the Department of Education in the Port Elizabeth district of Eastern Cape province participated in the study. A total of seventy three questionnaires were issued but only 41 were returned by respondents.

The school profile of the sample schools is represented in Table 3.2

Table 3.2: PROFILE OF SAMPLE SCHOOLS

Name of the school		No. of educators	No. of commerce educators	Total no. of grade 12 learners	No. of commerce learners (FET)	Total no. of learners
Cingani	A	37	05	85	340	1350
Coselelani	B	32	05	88	390	944
DDT Jabavu	C	36	06	120	385	1200
Douglas Mbopa	D	40	06	105	460	1335
James Jolobe	E	39	06	95	486	1480
Masiphathisane	F	46	10	263	510	1550
Mfesane	G	34	05	66	115	988
Motherwell	H	39	06	106	440	1188
Ncedo	I	36	06	88	368	880
Ndyebo	J	37	06	90	360	1020
Soqhayisa	K	36	06	88	368	880
Vulumzi	L	38	06	98	345	998

3.5 DATA COLLECTION

When planning research, it is important to determine whether or not the information needed is currently available from existing sources. The primary data are data collected from an original source. The secondary data are data collected from an existing source such as publications, databases and internal records

(Collis and Hussey, 2009:23). In this study, both primary and secondary data will be used because whether one is using positivist or interpretivism approach there will always be a combination of both data.

3.5.1 Secondary data

The data is collected from the literature review to get information in order to clarify the research problem of the study. The library of the Nelson Mandela Metropolitan University was used to search for the relevant information through books, journals and the internet. The information collected was also used in the construction of the questionnaires.

3.5.2 Primary data

The collection of primary data can be done using various methods such as questionnaires, interviews and critical incident techniques (Collis and Hussey, 2009:191). For this research study questionnaires were used and were delivered to each sample school. The aim in using questionnaires was to get opinions from the respondents about the research issue so as to be able to address the research questions. The questionnaire was designed by using closed questions with a five points Likert-type scale and a few open ended questions. The questionnaire consisted of Section A - Demographics, Section B - Basic Skills, Financial and Business, Section C - Creativity and Innovation and desire for higher education, Section D - Involvement of local business and organisation and Section E - open ended questions. The sample was selected according to cluster sampling.

The data were collected directly from the subjects constituting the sample and indirectly by making use of secondary research data. Ethical clearance was obtained before conducting the empirical research. The date for completion of questionnaires by the educators was communicated to the sample schools. A covering letter explaining the purpose of the research accompanied the questionnaire (See Annexure A). The questionnaires were delivered to each school personally by the researcher and the date to be collected was communicated to the schools. The data collection process was as follows:

- Identification of the contact person in each school and communicating the date for delivering and collecting the questionnaires;
- Identification of the respondents in each school in order to know how many questionnaires to bring;
- Delivering of the questionnaires with an accompanying explanatory letter to respondents;
- Telephonic follow up with the contact person in order to know how many have been completed;
- Collection of the questionnaires;
- Analysis of the information using descriptive statistics and summarising qualitative data;
- Make recommendations on improvement of entrepreneurship education in secondary schools of Motherwell.

3.6 MEASURING INSTRUMENT

Researchers conducting quantitative research recognise that they have to plan the study in detail, include the design of data collection instruments, data collection and management methodologies before the start of the research. The researcher does not study individual human beings but looks for relationships between variables that explain the behaviour of people (Borland, 2001:9). The aim is to be able to select a sample that will accurately represent the population so as to be able to infer the applicability of the results of the study. In developing the instrument for empirical data collection, the researcher selected concepts to assess so as to represent all the information to be assessed. Although the final version of the instrument can lead to objective scoring, the subjectivity built when developing it has to be taken into consideration.

The measuring instrument is used to test the response of people to questions set on the particular phenomena to be investigated. Collis and Hussey (2009:191) say that a questionnaire is a list of carefully structured questions which have been chosen with a view to get reliable responses from a particular group of people. The researcher has designed the questionnaire based on the following concepts:

Learner's knowledge concerning

Basic skills, financial and business;

Creativity, innovation and desire for higher education;

Involvement of local business and organisations;

Risks of starting a business;

Common body, teaching methods and Department support.

Questionnaires were used to assess whether educators are able to impart knowledge to learners concerning the concepts above. The questions consisted of open and closed questions. The closed questions restrict the respondent and they are easy to analyse and a coding frame can be formulated in advance. The open-ended questions allow respondents to answer in their own words and the analysis of responses will help the researcher gain more information. The questionnaires were developed using the concepts above for educators of the twelve sample schools. The closed questions were devised according to the five point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaires were distributed to teachers involved in teaching commercial subjects at Grade 10-12 level at the sample schools.

The researcher observed the implementation and progress of the entrepreneurship education programmes in the FET (Grade 10-12) in the sample schools through cluster interaction. Some of the sample schools started some entrepreneurship education programmes but have stopped them. The researcher also used information collected through literature review about entrepreneurship education globally when designing the questionnaires.

Educators who teach commercial subjects in the FET phase were expected to answer questionnaires in the sample schools. A letter requesting participation was written and sent to the Principals and the Heads of Department of Commerce of all sample schools. The profile sheet was sent to all schools to complete and return before the actual visit to the schools. The purpose of the

profile sheet was to get information about the number of commerce educators and learners in each school. The researcher explained the purpose of research on the day of delivering the questionnaire and also told the respondents about the confidentiality of the information collected.

The researcher sent the questionnaires to experts in entrepreneurship education to check validity because the research findings should accurately represent what is happening in the situation. The researcher also interviewed the subject advisors of Business Studies and Economics to get information about the current entrepreneurship education content and programmes' effectiveness and whether educators are trained properly to deal with the challenges.

3.7 QUESTIONNAIRE CONSTRUCTION

The designing of a questionnaire according to Collis and Hussey (2009:193) is concerned with the type of questions, their wording and the order of presentation, reliability and validity of responses. The types of questions that were asked were closed and open-ended. The wording and order of presentation depended on the measuring instrument used. The reliability was tested by how the respondents answered the different questions. The content format, type, wording and sequence were taken into consideration. The current study used one questionnaire for all educators who are teaching commercial subjects to Grade 10-12. The questions in the questionnaire were checked by an expert in entrepreneurship to ensure that they fulfil the requirements for question construction.

3.8 PILOT STUDY

It is important that a pilot study is done before conducting the empirical research using a larger sample. This helps to identify and rectify problems relating to the questionnaire before the actual data collection. There are two methods that can be used. The informal testing occurs when the draft questionnaire is sent to experts in the research topic for checking and adjustments done when necessary. This helps to determine whether the questions will solve the primary research question.

The formal testing occurs when the draft questionnaire is tested on a few people representing the target group and the responses used to rectify the questionnaire. The researcher used both methods because the questionnaire was sent to an expert in the research topic and the statistician to check it and adjustments were made. The questionnaire was then tested by giving it to three educators in one school who are senior and experienced and the feedback was used to rectify it.

3.9 DATA ANALYSIS

Once data have been collected, it has to be analysed so as to determine whether the primary objective of the study has been achieved. The primary objective of the study is to improve the current entrepreneurship education which is offered at secondary schools to Grade 10-12 learners by investigating whether it is able to develop skills and knowledge to school leavers. The researcher used the quantitative research approach and collected information from multiple sources. The survey method allows the researcher to gather information from educators, researcher's notes and subject specialists. The researcher did a comparison of data across the sample schools and cross-checked the information collected through the literature review to enhance the validity of the data.

The subject advisors of Business Studies and Economics were also interviewed to determine the effectiveness of the current entrepreneurship education programmes, workshops and the kind of support that is offered to educators. The outcome of the results presented will be interpreted accordingly to reflect the outcome. It is important that the quality of the research be checked. Collis and Hussey (2009: 204) list reliability, validity and generalisation as important concepts associated with the findings of quantitative research.

3.10 RESEARCH RELIABILITY AND VALIDITY

The research design has to include reliability and validity as steps which are necessary to ensure that research findings are reliable and valid. Reliability measures the stability of responses of respondents. Reliability of the responses from questions is an important issue because it is concerned with whether the findings are repeatable. According to Collis and Hussey (2009: 204) the findings

are reliable when someone repeats the research and finds the same results. The reliability of scores associated with the instrument is important in order to test whether the same results are obtained on repeated trials (Borrego et al., 2009:60). Reliability in quantitative research plays an important role because the measuring instrument must be able to reflect the same results in repeated studies. Reliability in the current study will be tested by internal consistency method where each item will be correlated with every other item across the sample and the average inter-item correlation will be taken as the index of reliability.

Validity refers to the relevance of the measure and is concerned with whether the instrument measures what it intends to measure. The designing of questionnaires is important as they should be able to collect data that represents what the researcher aims to study (Collis and Hussey, 2009:204). The researcher has done a literature study and has been exposed to entrepreneurship education offered in schools and was able to use the information when designing the questionnaire in order to assess the current entrepreneurship education programmes offered at secondary schools in Grade 10-12 levels in Motherwell. The questionnaire is composed of closed and open-ended questions.

Generalisation is concerned with the extent which the findings that are obtained on a specific sample can be applied to the population. In the present study, generalisation can be applied to a limited extent to certain cluster groups with similar situations. The findings of the current study will be used for future research on the topic.

3.11 SUMMARY

This chapter dealt with the research methodology that was followed in the current study. The primary objective of this study was to assess the current entrepreneurship education programmes offered at secondary schools in Grade 10-12 levels in Motherwell. The research paradigm chosen for this study was the mixed approach with the dominant paradigm being quantitative approach because the researcher aims to be objective in assessing whether educators are imparting entrepreneurship knowledge and skills in the current entrepreneurship education programmes. Educators were expected to answer closed as well as

open questions. The researcher aimed to produce valid and reliable results that can be generalised to a limited extent by using descriptive statistics.

Entrepreneurship education is a topic that is of interest to researchers because it is believed to have an influence on creating a positive attitude in learners at high school level (Cheung, 2008: 17; Lepoutre, van den Berghe, Tilleuil and Cruns, 2010:10; Steenekamp, Van der Merwe and Athayde 2011:47).

In the next chapter, the researcher will analyse the results using descriptive statistics and present findings. The results will be presented in tables and figures and interpreted according to findings.

CHAPTER 4

EMPIRICAL FINDINGS AND ANALYSIS

4.1 INTRODUCTION

This chapter deals with the interpretation and analysis of the quantitative and qualitative data collected by using a mixed method research approach. The main aim was to determine what the empirical study revealed in respect of the effectiveness of the current entrepreneurship education programmes in developing the knowledge and skills among the school leavers. The focus was on the Motherwell secondary schools which form a cluster.

Entrepreneurship is important in any country in order for the economy to grow. Future entrepreneurs need to be developed at an early stage to encourage creativity and innovation. Research has shown that countries that have higher growth rates have encouraged entrepreneurship. China became the fourth largest and fastest growing economy in the world with growth led by small and medium size enterprise (Millman, Matlay and Liu, 2008:803). India scored 52% compared to 17% in China, 4% in Russia and 25% in Brazil on potential entrepreneurship activity (Awasthi, 2011:108). The global trends on entrepreneurship and entrepreneurship education that were discussed in Chapter 2 of the study support the fact that entrepreneurship education or programmes should be taught at secondary school level. The involvement of local entrepreneurs as mentors and coaches is important.

Chapter 2 dealt with entrepreneurship education and programmes in different countries including South Africa. The lessons that South Africa should learn from global trends were highlighted. Chapter 3 dealt with the research methodology for the study. The mixed research approach was selected with the dominant paradigm being quantitative. This approach allowed the researcher to collect qualitative and quantitative data. The data collection tools used was a descriptive survey and personal interview. A descriptive survey according to Collis and Hussey (2009:77) is method that provides an accurate representation of the phenomena at a point in time. The views of educators concerning entrepreneurship education in secondary schools were assessed at a point in

time. The personal interview was done with the subject advisors of Business studies and Economics to determine the effectiveness of current entrepreneurship programmes, workshops and the support given to educators teaching Business studies. The questionnaires were designed to obtain information about the skills and knowledge about entrepreneurship imparted to the learners in the Grades 10-12. The questionnaires were distributed to the educators who teach commercial subjects in the Motherwell schools.

In this chapter, the data of the empirical investigation will be analysed and the findings will be discussed in detail. Presenting the results will solve the main research problem namely that there is no effective entrepreneurship education programme which provides school leavers with entrepreneurial knowledge and skills at the secondary schools in Motherwell. The empirical findings will be discussed under the following headings: demographics of the respondents, basic skills, creativity and innovation, reliability of the data, involvement of local business and organisations and views concerning risks, vision, traditional teaching methods and support by the department of education.

4.2 EMPIRICAL FINDINGS

4.2.1 Demographical findings of the study

The current study followed a quantitative and qualitative descriptive survey approach where twelve Motherwell secondary schools belonging to a cluster were selected for the study. The Port Elizabeth schools are divided into clusters and the Motherwell cluster was selected for this study. The profile of these schools was supplied in Chapter 3. The schools will be referred to as A to L alphabetically.

Table 4.1 PROFILE OF SAMPLE SCHOOLS

Name of the school		Number of commerce educators	Number who responded
Cingani	A	05	00
Coselelani	B	05	02
DDT Jabavu	C	06	00
Douglas Mbopa	D	06	05
James Jolobe	E	06	03
Masiphathisane	F	10	05
Mfesane	G	05	05
Motherwell	H	06	04
Ncedo	I	06	05
Ndyebo	J	06	05
Soqhayisa	K	06	04
Vulumzi	L	06	03
TOTAL		73	41

The survey population consisted of educators, senior educators and Heads of Departments of Commerce employed by the Department of Education. Seventy-three questionnaires were issued but only 41 were returned. The response rate was therefore 56.2%.

Figure 4.1 shows the composition of the respondents. There were only two schools which did not participate in the study. The target of a minimum of three educators and maximum of five was achieved in most of the sample schools.

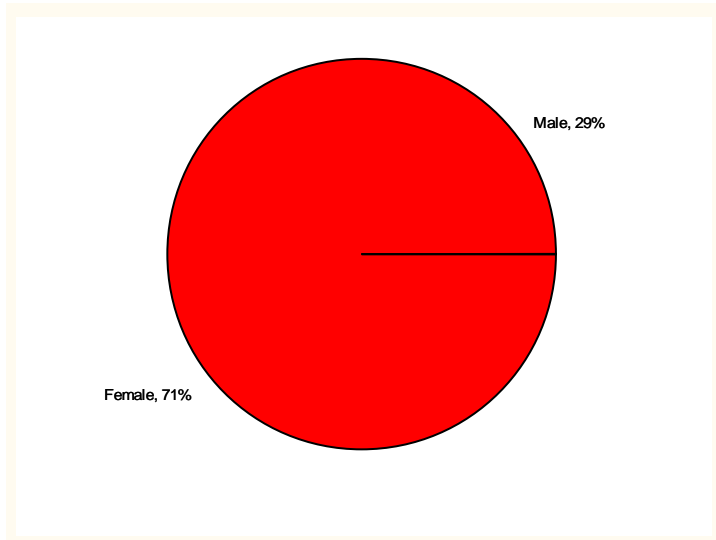


Figure 4.1: Gender Distribution

The demographic profile of the sample schools shows more responses from the female educators (71%) compared to the male educators (29%). The sample is representative of the gender composition because in reality there are more female educators in commercial subjects in all the Motherwell schools. The earlier research conducted by Sathorar also showed more females who teach entrepreneurship education (Sathorar 2009:103).

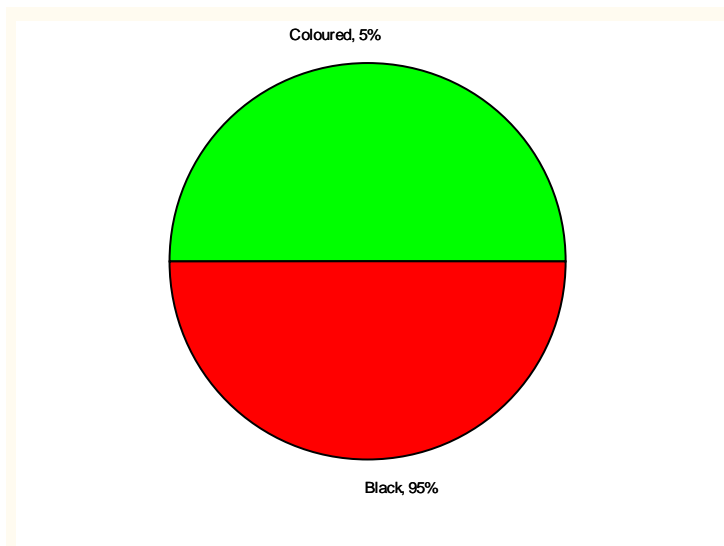


Figure 4.2: Population group

The first language of most of the respondents was Xhosa (95%) as most were blacks and only a small number (5%) were Afrikaans speaking.

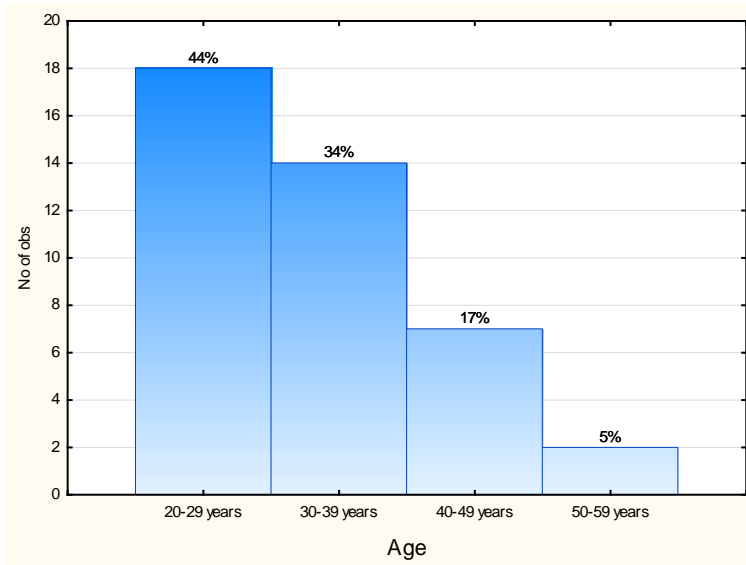


Figure 4.3: Age

The age group of the respondents shows more educators in the age range of 20-29 years (44%) and the next largest range was the 30-39 year age group (34%) which shows the response came primarily from the younger educators. The older educators who responded were aged 40-49 years (17%) and 50-59 years (5%). The young educators' views are relevant because they were still young in teaching when Business studies were introduced which encourages an interactive approach rather than the traditional teaching method of rote learning.

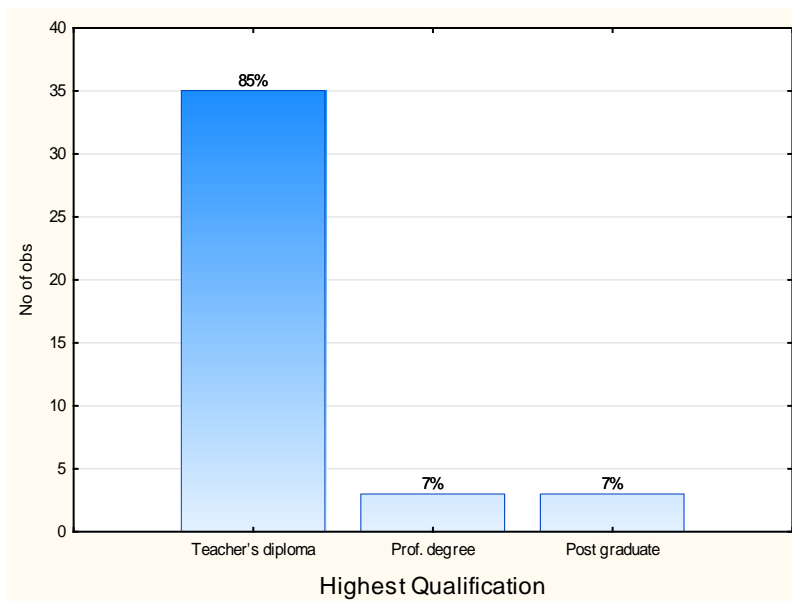


Figure 4.4: Highest Qualification

Most of the respondents have Teacher's Diploma (85%) and only 7% hold a Professional Degree and Postgraduate qualification respectively (a total of 14%). These educators have not gained more information about entrepreneurship in postgraduate and professional degrees. The information will be limited to what they learnt during their teacher training and the workshops that were needed for entrepreneurship education. According to Isaacs et al., (2007:625) teacher training institutions in South Africa have not responded to the demand and necessity for entrepreneurship education.

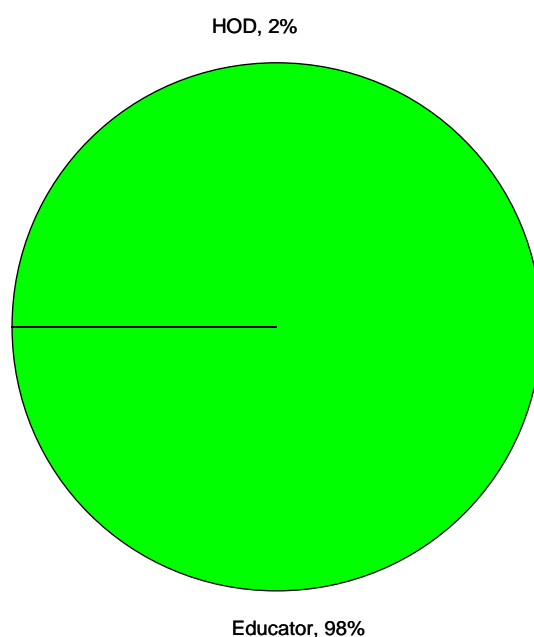


Figure 4.5: Job Title

This shows that most educators have not furthered their studies yet because they are still new to the teaching profession. As indicated, 98% of the educators and only one Head of Department of Commerce educator (2%) responded. Most of the Heads of Departments of Commerce educators did not show interest in

completing the questionnaire. It is necessary for educators who are teaching entrepreneurship education to be trained so as to be able to cope with the demands of imparting skills and knowledge to learners.

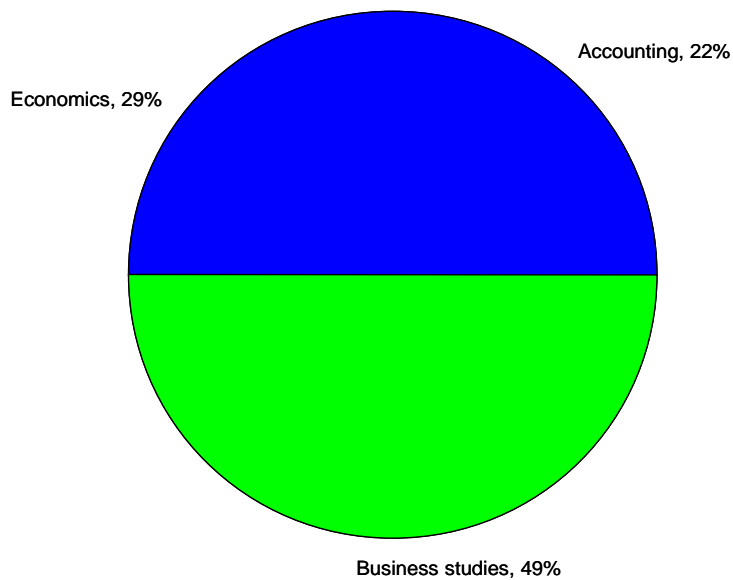


Figure 4.6: Subjects taught

There is a fair representation in the commercial subjects that the educators are currently teaching with accounting forming 22%, Business Studies 49% and Economics 29%. The subject allocation for educators changes every year in different schools hence the questionnaires were given to all commerce educators. Most of respondents teach Business studies and their information will be valuable for this study. The researcher will get information about whether integration is practised by commercial educators in the Motherwell schools. Integration is important because educators will be able to expose learners to the link between the various subjects.

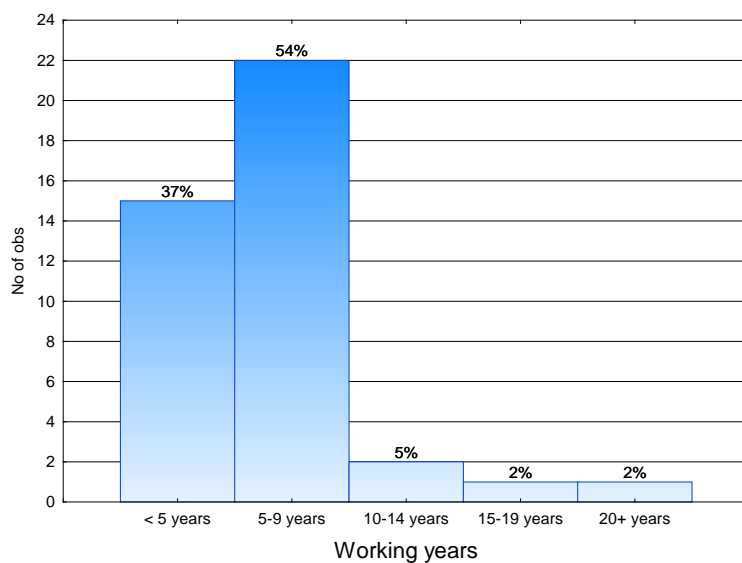


Figure4.7: Working experience

Most respondents (37%) have been working in their institutions for less than 5 years. The balance consists of 54% who have been working for 5-9 years while 5% have worked for 10-14 years and 4% have worked for more than 15years. Most experienced educators did not respond. In most of the Motherwell schools there are a few educators who have been working for more than ten years in the commerce departments. Their information will be valuable because they were trained in outcome based education which encourages the interactive approach.

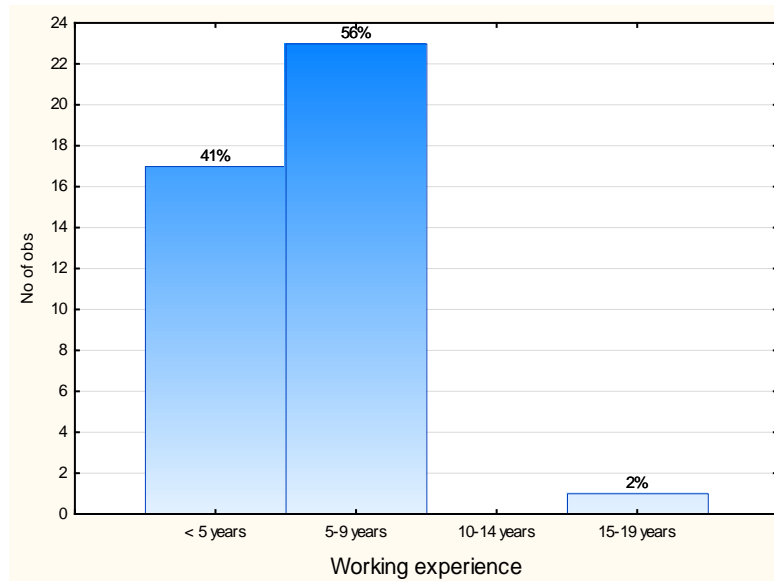


Figure 4.8: Teaching experience

Most respondents (56%) have teaching experience of 5-9 years while 41% have less than 5 years and 2% have 15-19 years teaching experience and this shows that the respondents do not have too much experience. The information will be valuable in detecting the teaching methods used by educators as they are still new to the teaching profession.

Educators who teach commercial subjects especially Business studies are required to follow the interactive approach. Sometimes when they are in schools, the same educators argue that the interactive approach is time consuming and follow the traditional approach used by other educators. The educators give limited practical activities to learners because they argue that the syllabus is too broad and they have to finish it in good time. These factors cause educators to not fully prepare the learners in entrepreneurship education.

Table 4.2 DEMOGRAPHIC FINDINGS

Characteristic	Category	Frequency	Percentage
Gender	Female	29	70.73
	Male	12	29.27
	Total	41	100.00
Age Group	20-29	18	43.90
	30-39	14	35.15
	40-49	07	17.07
	50-59	04	4.88
	Total	41	100.00
First Language	Xhosa	39	95.12
	Afrikaans	02	4.88
	Total	41	100.00
Highest Qualification	Teacher's Diploma	35	85.37
	Professional Degree	3	7.32
	Postgraduate qualification	3	7.32
	Total	41	100.00
Job Title	Educator	40	97.56
	HOD	01	2.44
	Total	41	100.00
Subjects taught	Accounting	09	21.95
	Business Studies	20	48.78
	Economics	12	29.27
	Total	41	100.00
Working years	< 5 years	15	36.59
	5-9 years	22	53.66
	10- 14	2	4.88
	15-19	1	2.44
	20+	1	2.44
	Total	41	100.00

Characteristic	Category	Frequency	Percentage
Working Experience	< 5 years	17	41.46
	5-9 years	23	56.10
	15-19 years	1	2.44
	Total	41	100.00
Population group	Black	39	95.12
	Coloured	2	4.88
	Total	41	100.00

4.2.2 Basic skills

The results concerning these skills will be summarised according to the various themes

4.2.2.1 Strategic skills

These skills are concerned with long term planning for the success of the business. According to Volkmann et al., (2009:88) entrepreneurship education should include business development, entrepreneurial skill development and personal development. There was a fair response to teaching these skills ranging from 51.22% to 68.29% indicating that educators teach learners how to plan and follow up on plans and how to generate and prioritise ideas. North (2002,) as cited by Steenekamp, Van der Merwe and Athayde (2011: 53), said that care should be exercised to prevent entrepreneurship education from becoming yet another activity where predominantly theoretical knowledge is acquired. Entrepreneurship education and training at school must fulfil a primary role of instilling relevant academic, business and positive life-long skills and prepare youth to contribute towards economic growth.

The findings indicate that although these skills are taught there is still room for improvement so that each learner acquires these skills before exiting in Grade 12.

4.2.2.2 Operational skills

Taylor, Jones and Boles (2004) as cited by Nieuwenhuizen and Groenewald (2008: 131) are of the opinion that action learning is an appropriate method for responding to the problem-centred needs of would be entrepreneurs because it engenders a personal, situational and emergent process in which groups of equals are encouraged to develop a critical questioning approach to solving their problems. In chapter 2, programmes that combine classroom education with hands on learning throughout the 11th and 12th grades are encouraged in USA (Smith and Salazar-Xirinachs, 2006:9). Educators thus need to integrate theory and practise when teaching entrepreneurship.

The educators need to teach pricing and sales tactics and how to present business plans to funders. There was a low response in teaching these skills (47.50 per cent). The learners learn better when they are hands-on and an integrated approach to entrepreneurship programmes by linking the classroom experience with market experience is important (Steenekamp et al., 2011: 53).

These findings show that teachers are not developing the operational skills in the learners of Motherwell which is supported by the response on the low involvement of local business and organisations in the schools. These organisations play an important role by offering holiday jobs and also mentoring learners.

4.2.2.3 Competitions (outside influence)

The Johannesburg Stock Exchange Liberty challenge game is offered to all schools on a voluntary basis to teach learners how to protect their cash as business people. The learners buy and sell shares and have to trade at least once a week. It is optional for the schools to participate in the JSE liberty challenge game. The teachers in most schools, because they are under pressure to finish the syllabus, are not interested in programmes that are not monitored by the Department of Education. The response from teachers indicated that only 53.66% encourage learners to participate in these games. Learners are able to grasp the skills about taking risks while playing the game. The research done by the United Nations Educational, Scientific and Cultural Organisation and

International Labour Organisation (Smith and Salazar-Xirinachs, 2006:49) show that when students work together in a practise enterprise, they become responsible for the enterprise's success, which gives them a stake in the learning process as well as securing their commitment and participation. In chapter 2 simulation and games were suggested for the successful entrepreneurship programmes in South Africa.

Competitions in schools and regions are not encouraged as shown by a response rate of only 35% for educators who indicated that competitions are conducted. JSE games are encouraged by a few educators because there are incentives for the winning teams and supervising teacher. In other competitions in schools and regions, educators are not given incentives to encourage learners to participate. In chapter 2, business plans and other competitions with business people as judges were suggested for the successful youth entrepreneurship programmes (www.weform.org 18 May 2012). It is important to expose learners to competition under simulated conditions so as to learn how to deal with it because an entrepreneur always faces competition.

The findings indicate that few educators expose learners to the JSE Liberty challenge game and also few educators encourage competitions in schools and regions.

4.2.2 4 Labour entrepreneurial skills

Only 51.28% of the educators responded positively to teaching labour issues concerning the employment of workers and the concern was that educators are not stressing the importance of maintaining good relationships with labourers as one of the important entrepreneurship skills. The findings indicate that more exposure to labour issues is needed. Partnerships with local business organisations such as Chambers of Commerce or local civic clubs such as Rotary help to bring new ideas to schools and to build stronger business education partnerships. The learners can learn about the practical experiences of dealing with labour issues from the local businesses.

South Africa is faced with strikes caused by dissatisfaction of labourers so learners need to be exposed to the various Acts concerning the employment of

labourers such as the Employment Equity Act, Worker's Compensation Act. The different Acts are taught as part of Business studies but learners need to be exposed to the practical implementation of them by businesses. These Acts can be grasped by learners when local entrepreneurs are invited to share their experiences with the learners.

4.2.2.5 Management skills

Educators teach learners how to do their cash flow budget (58.54 per cent) but the concern is the low response in monitoring the cash flow budget (30 per cent.). Nieuwenhuizen and Groenewald (2008: 130) mention that business skills training cover all management training in the business. Learners could grasp these skills when operating simulated businesses. In chapter 2 student buying and selling events using real money or loans were suggested as requirements for a successful youth entrepreneurship education programme. The proposed content of entrepreneurship training emphasizes management/leadership as one of the important concepts in teaching business skills (Isaacs et al., 2007:617).

The findings show a low response (43.59 %) to teaching proper record keeping. Successful businesses keep good records and manage their funds well and learners need to be taught these skills as early as possible. Most of the businesses fail not because of lack of funds but because of lack of managing the funds and keeping records properly.

**TABLE 4.3: DESCRIPTIVE STATISTICS FOR BASIC ENTREPRENEURSHIP
SKILLS**

Number	Sample size	1 %	2 %	3 %	4 %	5 %	Mean	Std. Deviation	Coefficient of variation
1	41	0	7.32	7.32	31.71	53.66	4.32	0.91	21.06%
2	41	0	4.88	9.76	17.07	68.29	4.49	0.87	19.37%
3	40	10.00	2.50	12.50	30.00	45.00	3.98	1.27	31.9%
4	40	20.00	7.50	32.50	5.00	35.00	3.28	1.57	46.34%
5	39	5.13	7.69	7.69	28.21	51.28	4.13	1.17	28.32%
6	41	0	2.44	7.32	21.95	68.29	4.56	0.74	16.22%
7	41	0	9.76	4.88	34.15	51.22	4.27	0.97	22.24%
8	41	12.20	14.63	2.44	17.07	53.66	3.85	1.51	39.22%
9	41	14.63	19.51	21.95	19.51	24.39	3.20	1.40	43.75%
10	41	12.20	17.07	17.07	24.39	29.27	3.41	1.40	41.06%
11	41	0	4.88	7.32	31.71	56.10	4.34	0.99	22.81%
12	40	7.50	2.50	5.00	27.50	57.50	4.25	1.17	27.52%
13	41	24.39	26.83	9.76	12.20	26.83	2.90	1.58	54.48%
14	41	0	4.88	12.20	24.39	58.54	4.32	1.04	24.07%
15	40	10.00	20.00	10.00	30.00	30.00	3.50	1.38	39.43%
16	40	10.00	10.00	12.50	20.00	47.50	3.85	1.39	36.10%
17	40	10.00	10.00	12.50	20.00	47.50	3.85	1.39	36.10%
18	39	2.56	7.69	15.38	30.77	43.59	4.05	1.07	26.42%
19	41	12.20	4.88	19.51	29.27	34.15	3.68	1.33	36.14%
20	40	2.50	2.50	2.50	17.50	75.00	4.60	0.87	18.91%
21	41	2.44	2.44	2.44	34.15	58.54	4.44	0.87	19.59%
22	41	4.88	2.44	12.20	21.95	58.54	4.27	1.10	25.76%
23	41	7.32	2.44	9.76	36.59	43.90	4.07	1.15	28.25%
24	41	12.20	2.44	12.20	36.59	36.59	3.83	1.30	33.94%
25	41	68.29	9.76	9.76	0	12.20	1.78	1.37	76.96%

The basic skill that scored the lowest according to Table 4.3 above was the operation of tuck-shops in schools by learners (12.20%). There is a concern for the low involvement of learners in the tuck-shops as indicated by a mean score of 1.78 and the coefficient of variation of 76.96%. The answers of educators varied greatly in answering this question. This means that only very few educators agree to involving learners in tuck-shops. Most of the learners in the sample schools are not involved in the tuck-shops so as to acquire practical business skills.

This creates problems sometimes in the management of funds and thus teachers do not encourage the learners to be involved. The learners cooperate well when they are included in the decisions of the school concerning the use of funds. This goes together with keeping the correct ratio between own and borrowed capital which also scored low (34.15%). The learners can grasp this skill when operating tuck-shops so that they do not use more borrowed capital to buy the stock. Monitoring the cash flow budget also scored low (30%).

Competitions in schools and regions have a mean score of 54.48% meaning that most of the educators do not encourage competitions. According to the literature review, countries like Canada and China which encourage competitions in schools encourage active participation of learners. The learners acquire business skills while presenting business plans for competitions. South Africa needs to learn from global trends. The participation of learners in tuck-shops makes them learn sales tactics. There is low participation of learners in the sample schools.

From the Table 4.3 above, it can be seen that the most important skill taught to learners is that planning is the key in a business with a mean score of 4.60 and coefficient of variation of 18.91%. If the coefficient of variation is larger than 20%, it means that individual answers vary greatly from one another. Teaching learners how to generate ideas for the business has a mean score of 4.56 and coefficient of variation of 16.22 per cent. This means that the answers of teachers regarding planning and generating ideas did not vary greatly. These concepts are very important for entrepreneurship and each learner has to acquire these skills.

All the mean scores are above 2.50 indicating that most schools do teach the basic skills theoretically but not all of them. The low standard deviation relative to the mean suggests that the mean provides a good representation of the data.

Table 4.4 DESCRIPTIVE STATISTICS FOR CREATIVITY AND INNOVATION SKILLS

Number	Sample size	1 %	2 %	3 %	4 %	5 %	Mean	Std. Deviation	Coefficient of variation
27	41	24.39	2.44	12.20	17.07	43.90	3.54	1.64	46.44%
28	40	2.50	7.50	5.00	22.50	62.50	4.35	1.05	24.14%
29	40	35.00	22.50	17.50	7.50	17.50	2.50	1.48	59.20%
30	41	9.76	7.32	2.44	19.51	60.98	4.15	1.35	32.53%
31	40	17.50	15.00	7.50	10.00	50.00	3.60	1.63	45.28%
32	41	0	4.88	7.32	12.20	75.61	4.54	1.00	22.03%
33	41	7.32	7.32	17.07	14.63	53.66	4.00	1.30	32.50%
34	41	7.32	2.44	21.95	26.83	41.46	3.98	1.19	29.90%
35	41	2.44	4.88	9.76	26.83	56.10	4.29	1.01	23.54%
36	41	12.20	12.20	12.20	19.51	43.90	3.71	1.45	39.08%

4.2.3 Creativity and Innovation findings

Creativity and innovation can be encouraged when learners operate simulated businesses during the school year. Antonites and van Vuuren (2005:257) define creativity as the development and generation of ideas. Innovation is the practical implementation of the idea to ensure the achievement of the desired goal. According to Isaacs et al., (2007:617), creativity and innovation are important entrepreneurial skills that need to be taught in the context of entrepreneurial training in secondary schools.

The results for creativity and innovation will be summarised according to themes:

4.2 3.1 Operation creativity and innovation

Educators are not encouraging creativity in learners as only 43.9% encourages learners to be creative in developing business plans for competitions. This is supported by the fact that competitions are not encouraged in schools and regions. Creativity is an element that needs to be encouraged in learners. Only 17.50% of educators encourage innovation by letting learners operate simulated businesses during the school year. According to Nieuwenhuizen and Groenewald (2008:131), entrepreneurial training involves the establishment of businesses encouraging creativity and innovation.

The findings reveal that creativity and innovation as elements of entrepreneurship education are not encouraged by educators in the Motherwell schools.

4.2.3. Studying entrepreneurship

Although 53.66% of the educators indicated that learners are interested in furthering their studies in Entrepreneurship, only 43.90% indicated that learners are fully prepared to do Entrepreneurship in higher learning institutions. This shows that educators are not preparing learners properly by teaching them the various entrepreneurship skills. There was a low response to learners preferring a career with financial stability (41.46%). This means that learners are willing to take a risk which is a good sign for entrepreneurship education.

Most of the respondents have not done any further training after the Teacher's Diploma thus they are not preparing learners fully for Entrepreneurship in institutions of higher learning.

4.2 3.3 Business challenges

There was a positive response (60.98%) to giving learners projects on different careers so that learners are able to identify challenges facing businesses. This is contradicted with the low percentage of learners operating simulated businesses (17.50%) and the low involvement in tuck-shops. It is only when learners practise in simulated businesses and tuck-shops that they learn about the various challenges facing businesses.

In countries like Hungary learners operate simulated businesses. The students learn the preconditions of running a successful enterprise under simulated conditions and have various roles as managing director, manager of sales, marketing account manager or accountant according to the organisation of the firm. These programmes provide the students with practical business knowledge (Csapo and Pethoe, 2006:3). The learners are able to identify challenges facing their businesses and devise ways to solve these problems under the guidance of the educators.

The learners are able to link Business studies with Economics and Accounting as shown in the table by a mean score of 4.54. The low mean which is 2.50 indicates that in most schools, innovation is not encouraged by letting learners operate simulated businesses during the school year. All the mean scores are above 2.50 meaning that creativity and innovation are encouraged by some educators to some extent. The low standard deviation relative to the mean indicates that the mean represents the data well. The coefficient of variation is larger than 20 per cent meaning that the individual answers vary greatly from one another. Most of the respondents are young teachers and therefore they were introduced to innovation and creativity during their teacher training.

The findings of the current study show that creativity and innovation are not encouraged by the way that entrepreneurship education is presented by educators as they tend to concentrate on the theoretical aspects. Although learners are given projects to research on specific issues and presentations are done, learners are not exposed to the actual practical part of entrepreneurship. There is limited opportunity for learners to acquire creativity and innovation because educators are pressured to complete the syllabus.

4.3 RELIABILITY OF DATA

Reliability of the data collected has to be tested when variables developed through summated scales are used. It is important to know whether the same set of questions would produce the same results using the different respondents. Variables which are derived from such an instrument would be considered to be reliable only when responses are stable over repeated administrations of the test (Collis and Hussey, 2009:64).

The reliability of the responses to the questionnaire was tested by using the internal consistency method. According to Collis and Hussey (2009:204) every item is correlated with every other item across the sample and the average inter-item correlation is taken as the index of reliability. The questionnaire was divided into three sections and the correlation was done with Sections B and C. The factors testing the same concepts were identified and alphas were calculated.

Gliem and Gliem (2003:87) explains that when a number of items are formulated to measure a certain construct, there must be a high degree of similarity among them as they are expected to measure one common construct. The Cronbach alpha reliability coefficient normally ranges between zero and one. The closer it is to one, the greater the internal consistency of the items in the scale. If the items strongly correlate with each other, the internal reliability will be high and the alpha coefficient will be close to one while if they do not correlate well, the alpha coefficient will be close to zero. Reliability coefficients of less than 0.50 are not considered acceptable and those above 0.70 are considered to be acceptable.

Table 4.5 RELIABILITY FINDINGS ON BASIC SKILLS

Basic Skills	Cronbach alpha values
Strategic planning skills	0.80
Operational skills	0.74
Competitions (outside influence)	0.47
Entrepreneurial labour issues	0.43
Management skills	0.60

In the basic skills, generating and prioritising ideas, start-up planning and following up on plans are strategic planning skills and the alpha coefficient of 0.80 is considered to be acceptable. Most of the educators in the sample schools are teaching strategic planning skills and thus the measuring instrument reflected their views.

Sales and pricing tactics and presenting plans to funders are operational skills and have an alpha coefficient of 0.74 which is acceptable. These skills can be practised well when learners operate simulated businesses.

The competitions in schools and regions and JSE games have a coefficient of 0.47 which is not acceptable. There are few educators who encourage competitions in schools and regions and also few educators who encourage the scholars' participation in JSE games which are also competitions. The educators encourage JSE games because there are incentives for the winning teams and the supervising educators. The low Cronbach alpha (0.47) indicates that something should be done to encourage competitions in schools. The measuring instrument did not measure the response of educators concerning competitions well.

The entrepreneurial labour issues with a low Cronbach alpha (0.43) meant that the measuring instrument did not measure the vision and labour issues well. This could be because of the phrasing of the questionnaire. The respondents may not have understood what was being asked in the questionnaire. The vision will be dropped as it does not correlate well with labour issues so as to increase the value of the entrepreneurial labour issues.

The monitoring of cash flow budget, proper record keeping and controlling which are management skills have an alpha coefficient of 0.60 which is acceptable. This means that the measuring instrument measured the respondent's views concerning basic management skills well.

Table 4.6 RELIABILITY FINDINGS ON CREATIVITY AND INNOVATION

Creativity and Innovation and desire for higher education	Cronbach alpha values
Operational creativity and innovation	0.68
Studying entrepreneurship	0.74
Business challenges	0.61

The operational creativity and innovation has an alpha coefficient of 0.68 which is acceptable. This means that the presentation of business plans and operation of simulated businesses by learners in the sample schools is measured correctly by the questionnaires. This reflects the real situation happening in the sample schools

The studying of entrepreneurship with a Cronbach alpha coefficient of 0.74 is acceptable. It means that the measuring instrument measured the learners' ability to further their studies in entrepreneurship and choosing of careers with financial stability and also learners are prepared for entrepreneurship in institutions of higher learning.

The business challenges have an alpha coefficient of 0.61 which is acceptable. This means that the instrument for assessing whether learners are given projects on different careers and are able to identify challenges facing businesses measures well. The measuring instrument does measure creativity and innovation and desire for higher education.

4.4 INVOLVEMENT OF LOCAL BUSINESS AND ORGANISATIONS

The respondents had to indicate Yes or No on the involvement of local entrepreneurs. The responses are tabulated in table 4.7

Table 4.7 THE INVOLVEMENT OF LOCAL BUSINESS AND ORGANISATIONS

STATEMENT	YES	NO	TOTAL
Local entrepreneurs are invited to the school	26.83	73.17	100
Local entrepreneurs invite learners to their businesses	34.15	65.85	100
Local organisations are invited to the school	22.50	77.50	100
Some learners are mentored by the local organisations	17.50	82.50	100
Local organisation and local entrepreneurs offer employment to learners	26.83	73.17	100

The response of 73.17% indicates that local entrepreneurs are not invited to most of the schools in Motherwell. There are also few entrepreneurs who invite

learners to their businesses as shown by the response of 65.85%. The relationship between the schools and entrepreneurs is not encouraged to enable the exposure of learners to practical part of the business. There are few learners who are mentored by the local organisations (17.50%) and also few learners are given employment by local organisations and local entrepreneurs (26.83%). The involvement of entrepreneurs is limited to study bursaries for deserving learners.

4.5 QUALITATIVE FINDINGS

Respondents were also presented with open ended questions and asked to:

- Identify other basic skills imparted to learners but not mentioned in the questionnaire;
- Explain their views concerning the risks of starting the business and whether they would encourage learners to start their own business;
- Explain their views concerning borrowed capital to finance business;
- Mention whether they have a vision for entrepreneurship in South Africa;
- Mention whether they changed to the interactive approach or are still using traditional teaching methods and their relative advantages and disadvantages;
- Explain whether they would encourage that a common body be formed that supports educators involved in Entrepreneurship education;
- Explain their views concerning the use of the same textbooks;
- Explain whether the Department is offering workshops and support to educators teaching Business Studies.

4.5.1 Results of qualitative findings

The results will be summarised according to themes.

4.5.1.1 Practical business skills

Educators mentioned the interpretation of financial statements and computer skills which are not mentioned in the questionnaire. These skills could be taught with the help of the local organisations and local businesses because most schools in Motherwell lack the resources for teaching these skills. The sample schools are not involving these organisations as reflected in Table 4.7 above.

The interpretation of financial statements and computer skills are concepts that have to be taught to learners and they need to be exposed to their practical implementation. The JSE Liberty challenge game exposes learners to the interpretation of financial statements of different companies so as to invest in companies with good financial standing. Most of the learners in the sample schools are not involved in this game. In Motherwell there are a lot of schools that do not have enough computers to train learners and thus involvement of local organisations can help overcome this problem.

Most respondents are willing to face risks. The respondents indicated that learners must be given knowledge about business risks and thus they would encourage learners to start their own business. If educators are willing to face risks then learners will be able to learn under simulated conditions and be able to open their own businesses in the future.

Respondents were concerned about the use of borrowed capital and thus said that a person using borrowed capital has to make sure that the business is making sustainable profit to be able to pay back debt. Some respondents indicated that it is a huge risk because interest charged is high and some businesses cope while others do not cope. It is wise to use more own capital which is flexible and less borrowed capital because there is no control over macro elements like interest rates.

Some respondents indicated that borrowed capital can lead to financial difficulties if the business fails because of debt incurred especially if the business does not have investments. This confirms the quantitative findings which indicated a low score in keeping the correct ratio between the borrowed capital and own capital. This means that learners are not taught the importance of keeping the correct ratio which can lead to financial difficulties when the business fails. All the answers show that learners have to be taught about the dangers of using money that does not belong to the business.

4.5.1.2 Strategic planning

Some respondents indicated that they would like to see more youth development on entrepreneurship as this might solve the problem of unemployment and

decrease the crime rate. Entrepreneurship will be able to boost the economy and thus learners need to be encouraged to be entrepreneurs. South Africa as an emerging economy and as a member of BRICS is more exposed globally to enable learning and sharing.

All these responses indicated that educators need to have a clear vision about entrepreneurship so as to be able to prepare learners well. The quantitative findings show that learners were not fully prepared for the world of work.

The respondents indicated that they have changed to interactive teaching methodologies because learners are involved in the lesson and brainstorm views on a particular topic and even present some topics in class. The disadvantage is that learners are lazy to go to libraries and research information and this leads to delays for the teacher in completing the syllabus. Some indicated that interactive teaching encourages creative thinking and problem solving techniques in learners. The disadvantage is that learners are still passive, not willing to air their views and want answers from teachers. Others indicated that they have changed to interactive teaching because it is learner centred and the teacher guides the learners towards the final goal. The disadvantage is that learners are not prepared early in the general education and training phase (Grade 8 and 9) for the interactive teaching approach because change is difficult for learners and for teachers.

The responses indicated that most educators have not changed to the interactive teaching approach which is needed when teaching entrepreneurship. This contradicts the demographic findings of respondents who do not have much experience and have not been taught using the interactive teaching approach. The syllabus completion is mentioned as a challenge which needs to be looked at by the Department.

4.5.1.3 Vision for entrepreneurship

Educators in the sample schools indicated that they need more information and exposure to entrepreneurship education so they can share their information and help one another. Funding is needed to introduce the practical part of the content

in schools. Partnerships with local organisations and local businesses can overcome the problem of funding.

The response from educators indicates that a common body for controlling entrepreneurship programmes needs to be formed. This body can help to provide learners with information about entrepreneurship at an early stage as well as train teachers and give them information about recent issues regarding entrepreneurship. The successful entrepreneurs can encourage more entrepreneurs so that the economy grows faster.

The use of different textbooks by educators was encouraged in order to gain more information from different textbooks and expose learners to the views of different authors. The response indicates that educators need to use the variety of textbooks so as to have a wide knowledge about the subject.

The views concerning the support by the Department was that the National Curriculum Statement training was done briefly when it was introduced in 2008. There was no follow up done in schools and thus educators continued with their traditional teaching methods that encouraged rote learning and passive learners. The introduction of the Curriculum and Assessment Policy Statement in 2011 to Grade 10 also did not change the approach. The training workshops were done but more workshops are needed for entrepreneurship as some aspects are not covered due to time constraints. The Department has to monitor the implementation of information in schools through regular visits.

The response indicated that the Department is not offering enough workshops for educators who are teaching Business Studies in order that they share experiences and knowledge. This information was supported by the subject advisor through personal interviews. The response from the subject advisor showed that Business studies do have practical information to be taught to learners and that educators need to encourage partnership with local business and organisations. The Subject advisor offers support to educators and visits them to ensure that the problems encountered are solved.

The qualitative information reveals that entrepreneurship education needs to improve and this is supported by the quantitative findings which indicate a lack of

practical exposure for learners. The basic skills that were quantitatively measured showed that learners were prepared theoretically but the practical component of entrepreneurship is still lacking.

4.6 GOVERNMENT POLICIES AND DEPARTMENT OF EDUCATION SUPPORT

In Chapter 2, China, Hong Kong and the USA were identified as countries where the governments support entrepreneurship education implementation programmes by developing policies that enhance the implementation of entrepreneurship education as well as policies that support teachers in implementing these programmes. The Chinese government has begun to consider entrepreneurship as a key element of policies aimed at solving youth unemployment problems. The government has introduced entrepreneurship education in the secondary school curriculum and activities include business plan competitions and part-time work placement (Millman, Matlay and Liu, 2008:806).

The sample schools showed low involvement of learners in competitions and part-time work placement. There are no efforts by government to encourage the involvement of local businesses and organisations in the sample schools. It is left to schools to use their discretion in this regard and this creates problems.

It was further mentioned in chapter 2, that a vital component of the government's ten year vision of Accelerated and Growth Initiative is for the nation to become entrepreneurial (Nicolaidis, 2011:1045). The government is not developing a spirit of enterprise at an early stage in learners in secondary schools. This is supported by the response by educators about the lack of workshops on entrepreneurship education. The response from the subject advisor of Business Studies shows that because of lack of funds they are not able to provide workshops regularly. The schools can meet as clusters to share their views and set common tasks for learners. A partnership between schools and local businesses and non-profit organisations was encouraged by the Subject Advisor.

The Hong Kong government developed an environment conducive for SMME's to grow and improve in technology application and innovation (Chua, 2002:17). Creativity and innovation have to be encouraged at school level by the

government when learners operate simulated businesses. In the sample schools, creativity and innovation are low because there are no policies in place to encourage innovation and no support and encouragement by government for schools.

There are no regular workshops organised by the Department to ensure that the National Curriculum Statement is implemented correctly in schools. The Department places too much emphasis on assessment activities which are mainly theoretical and thus educators neglect the practical part which is not monitored. The global trends showed more emphasis is placed on teacher support and regular training.

Chapter 2, described the Youth Enterprise Programmes which are operating in South Africa. These programmes help young people to become job creators and they involve the whole community including local business people. The educators and learners are supported by pedagogical teams in their entrepreneurship activities (Smith and Salazar-Xirinachs, 2006:116). The educators in the sample schools are not aware of these programmes.

4.7 SUMMARY

This chapter discussed the results of the questionnaires which were distributed to the respondents. The chapter started with the analysis of demographic findings of the study which aimed at assessing the gender, population group, age, qualifications, job titles, subjects taught and experience of the respondents. It was discovered that most of the respondents were black females between the ages of 20 to 39 years. Another aspect revealed by the study was that most of respondents had a Teacher's Diploma and work experience ranging from 0 to 9 years meaning that they would be open to further development and training.

The empirical results were tested for internal reliability using Cronbach's alpha values and the highest score was 0.80 indicating that generating ideas, prioritising the various ideas, doing start-up planning by preparing budgets for the short-term and long-term and encouraging the follow-up of plans are measured well by the questionnaire. These are important skills for entrepreneurship. The internal reliability measures which were used in this study showed a low reliability

in competitions, innovation and creativity and entrepreneurial labour issues. This shows that the measuring instrument used for these concepts did not measure them well according to the responses from respondents in the sample schools.

The respondents indicated that most of the theoretical part of entrepreneurship is taught to learners but because of time constraints, the practical part is not practised by learners because it is not assessed by the Department. The prize-giving ceremonies concentrate on achievements on tasks and examinations and sport.

The findings of the study which show a lack of involvement by local organisations supports the findings of Ghazzawi (2010:14) as it found that integration of entrepreneurial programmes into the education system of secondary schools is a prerequisite in developing the necessary skills to start and run successful businesses. The practical part of entrepreneurship which is lacking can be done without rushing to finish the syllabus. These entrepreneurship education programmes can be offered by organisations which can work hand-in hand with schools.

The final summary, recommendations and conclusion of this study will be presented in the following chapter.

CHAPTER 5

SUMMARY AND RECOMMENDATIONS

“The secret of happiness is not in doing what one likes, but in liking what one has to do” King George V of England as cited by (David Molapo 2002:45)

5.1 INTRODUCTION

The purpose of this chapter is to present the summary, conclusion and recommendations of the study. A brief overview of the previous chapters will be given. The aim of this chapter is to be able to propose recommendations based on the information collected in the study.

5.2 SUMMARY OF THE STUDY

Chapter 1 of this study outlined the research problem and research objectives, the methodology used, as well as the limitations of the research. The main research problem of this study involved assessing the current entrepreneurship education programmes offered at secondary schools at Grade 10-12 level in the Motherwell. The research objectives were described. The research methodology used was a mixed approach.

Chapter 2 provided an overview of a literature study of entrepreneurship education and programmes in Canada, China, Hong Kong, Hungary, India, New Zealand, USA and South Africa. Lessons to be learnt by South Africa from global trends were highlighted. The following entrepreneurship education skills were identified and formed the basis of the empirical investigation:

- Strategic skills (how to plan and follow up on plans and also generating and prioritising ideas);
- Operational skills (pricing and sales tactics and how to present business plans to funders);
- Competitions (Johannesburg Stock Exchange liberty challenge, local and regional competitions);
- Labour entrepreneurial skills (labour issues and employment of workers);

- Management skills (developing and monitoring a cash flow budget, operation of a simulated business and proper record keeping);
- Operational creativity and innovation (developing business plans for competitions and the operation of simulated businesses during the school year);
- Studying entrepreneurship (furthering studies in entrepreneurship and careers with financial stability);
- Business challenges (projects on different careers and linking Business studies with Economics and Accounting);
- Involvement of local business and organisations.

Chapter 3 dealt with the research methodology by focusing on the selection of the research paradigm, the population and sampling and data collection instrument. The research questions addressed whether educators teach the entrepreneurship skills to learners at secondary schools of Motherwell.

Chapter 4 dealt with the empirical findings based on the data from 41 respondents in the twelve secondary schools of Motherwell selected according to cluster sampling. The findings were presented according to the following themes:

- Demographical findings of the study;
- Basic skills;
- Creativity and innovation and desire for higher education;
- Reliability of data;
- Involvement of local business and organisations;
- Qualitative findings.

The demographic findings revealed that most the respondents were female between the ages of 20 to 39 and did not have much experience in teaching entrepreneurship education. The findings on basic skills revealed that most of the basic skills are taught to learners theoretically but the practical implementation of them is still deficient. The operation of tuck-shops by learners is not encouraged. Competitions in schools and regions are also not encouraged by educators whereas in countries where they are encouraged, they generate active participation by the learners.

Creativity and innovation findings revealed that learners are not encouraged to be creative in presenting business plans since competitions are also not encouraged by schools. The learners desire to do entrepreneurship in higher institutions but are not fully prepared by educators.

The reliability of the measuring instrument was tested by Cronbach alpha coefficient. Some alpha coefficients were acceptable and some were low indicating that responses did not measure for the tested skill well.

The findings also show a low involvement of the local businesses and organisations in schools. There is no partnership between the schools and local entrepreneurship in developing the entrepreneurship skills in learners.

The qualitative findings supported the quantitative findings in that practical skills like computer skills were not taught by educators.

The conclusions for this research will be summarised by referring to learners' knowledge concerning the various entrepreneurship skills presented in Chapter 1 and the research findings presented in Chapter 4.

Strategic skills are taught in most secondary schools of Motherwell in the Business studies subject at the FET level. These skills are concerned with long term planning for the success of the business. Teachers mention that because of time constraints and too much information to be covered during the year, the practical part is neglected. Entrepreneurship should be a separate subject so that educators are able to allocate more time to the theory and practical part of the subject.

There are very few educators who teach the operational skills like pricing and sales tactics and how to present business plans to funders in the secondary schools of Motherwell. In competitions, Johannesburg Stock Exchange liberty game is encouraged by most educators because there are incentives offered to winning teams and supervising educators but other forms of school and regional competitions are only encouraged by a few educators. The Department of Education does not encourage schools to participate in competitions and does not offer any rewards.

Labour entrepreneurial skills concerning the employment of workers are taught but exposure to real business issues concerning labourers is not encouraged. There are few educators who teach learners how to monitor the cash flow budget in the management skills. This skill is grasped when learners operate simulated businesses.

Most educators do not encourage creativity in learners by letting them develop business plans for competitions. Creativity and innovation can also be encouraged when learners are allowed to operate simulated businesses. Learners are not fully prepared to do entrepreneurship in institutions of higher learning although they are interested in furthering their studies in Entrepreneurship. This is supported but lack of workshops by the Department and limited practical exposure of learners to real businesses issues limits their progress.

Learners can identify challenges facing businesses and strategies to deal with those challenges. The practical part of facing the real challenges is lacking due to lack of involvement of local businesses and organisations in the Motherwell schools. The relationship between these organisations and schools is not encouraged so as to expose learners to the practical part of the business.

In qualitative findings educators mention computer skills and the interpretation of financial statements which is supported by a lack of practical involvement of learners and the lack of resources like computers. Training learners in computer skills is also important for entrepreneurs and the involvement of local organisations can help schools which lack resources.

The findings show that learners are not trained fully in entrepreneurship to be able to create job opportunities. Learners are not exposed to the practical part of entrepreneurship whilst still at school. Learners are interested in furthering their studies in entrepreneurship but are not fully prepared these studies. The learners are prepared to face risks as shown by the low response in learners preferring careers with financial stability. In chapter 2 it was mentioned that there should be increased use of role playing and simulation by learners to practise analytical and decision making skills (www.weforum.org 18 May 2012). In the sample schools

these skills are not encouraged by educators. Recommendations will be formulated to improve entrepreneurship education at secondary schools.

5.3 RECOMMENDATIONS

The learners in the sample schools are positive about entrepreneurial opportunities as shown by a low response in learners preferring careers with financial stability but also suggested that youth entrepreneurial development is still lacking because of the lack of involvement by local entrepreneurs and local organisations, lack of competitions and the use of simulated businesses in the development of the youth.

Recommendations will now be presented to help in improving the entrepreneurship education in secondary schools. These will be based on the empirical findings investigating whether the entrepreneurship educational programmes offered in secondary schools are effective in developing knowledge and skills to school leavers. The recommendations include:

- The learners in secondary schools should be encouraged to take charge of their own education and be willing to be involved in programmes that encourage active participation so as to be able to attain good marks in both the theory and practical aspects of entrepreneurship. The low achievers in theoretical information will be encouraged when they realise that their performance is rewarded. These learners should be encouraged to be involved in an activity that will help them develop the knowledge, skills and experience required for the successful entrepreneurship activity (Tuck-shops and simulated businesses during the school year).
- The Outcomes Based Education, National Curriculum Statement and Curriculum Policy Statement which have been introduced by the Department must be followed but adjustments must be made to teaching methods to follow the interactive approach required by entrepreneurship. The monitoring of implementation should be done in schools. The Department of Education should encourage partnerships between the South African Institute for Entrepreneurship and the schools.
- The educators should change the traditional approach of listen and take notes by learners to a more participative environment that encourages

integration across the subjects. This will help Business study educators in solving their problems in financial and economic concepts when they are not familiar with them.

- Educators should read business magazines, business newspapers, and search the internet to remain informed about current issues and trends so as to inform their learners. They should also encourage learners to go to the library and search for information.
- The local businesses should be involved in the teaching of Entrepreneurship and sharing their practical experiences in the running of their businesses. The local businesses should not only provide assistance to the needy learners but should be visible in schools throughout the year and offer holiday jobs to learners. The Department of Education should encourage the partnership between local businesses and local organisations and schools in each district. The learners will be able to link the theory with the outside world.
- The assessment of learners should include the practical presentation of business plans in competitions extending from local school level to the regions and learners should be rewarded for participating. The local businesses can be invited as judges.
- Operation of simulated businesses during the school year in which learners learn various roles as managing directors. The learners can be exposed to real practical challenges facing businesses and this will create a desire to start their businesses in the future. Learners should exit in Grade 12 having skills about the ups and downs of business.
- The Department of Education should provide guidance on the use of textbooks by learners to ensure that learners use the same textbooks to ensure that the basic information is provided to all learners. A variety of textbooks can be used as supplementary information by the educators.
- The Department of Education should encourage schools to participate in Johannesburg Stock Exchange liberty challenge game where learners buy and sell shares. The learners can learn under simulated conditions about the investment opportunities and risks facing investors. These skills can be used when learners operate their businesses in the future.

- On-going training through workshops is required to all educators teaching entrepreneurship education. The educators must be correctly prepared to train learners and to expose them to the practical part of entrepreneurship.
- Policy makers should incorporate comprehensive entrepreneurship education programmes from primary school to secondary to vocational and universities and adult centres. Educators should be consulted when policies are formulated. These programmes can be offered by non-profit organisations that work hand in hand with schools (e.g. Know your Business and the Youth Enterprise Society)
- Entrepreneurship education should be offered as an optional separate subject to all learners and not only as part of Business Studies. This will help to equip all learners with entrepreneurship skills and also address the problems highlighted by educators of time constraints thus ensuring that there is enough time for practical implementation.
- A common body should be formed to support all educators involved in entrepreneurship education. This body would allow sharing of knowledge and experience among educators and experts. The learners will also be guided at an early stage in entrepreneurship. The Department of Education should establish this common body in each district so as to expose educators to the entrepreneurship education programmes that already exist in South Africa. This body will be able to coordinate the various entrepreneurship education programmes
- A programme should be developed between the local businesses and the schools so that learners can acquire holiday jobs in which they will be able to gain practical experience of the running of the businesses and handling challenges facing these businesses.
- Finally, networking with other countries and learning from global trends can also be encouraged because South Africa as a developing country is a member of BRICS.

The present study confirms the findings that in the six urban schools sampled in the Eastern Cape only three offered entrepreneurship education programmes (Isaacs, Visser, Friedrich and Brijlal, 2007:620). In the sample schools of

Motherwell, most of them were not aware of entrepreneurship programmes and few were involving learners in the JSE Liberty challenge game.

The study addressed the primary research question of assessment of current entrepreneurship education programmes in developing knowledge and skills in school leavers. The school leavers are not trained properly to be job creators. The literature study was done and entrepreneurship education programmes used in various countries and South Africa were identified. The lessons that South Africa can learn from global trends were also identified. The involvement of local businesses and organisations and non-profit organisations like the Chamber of Commerce and Rotary is a lesson learnt from the USA approach (www.nfte.com15 April 2012).

This empirical study was done with 41 educators in the Motherwell secondary schools so as to determine the current entrepreneurship education programmes' effectiveness in developing knowledge and skills in school leavers. The analysis of the results showed that in most schools the entrepreneurship education in the Business studies subject was not effective in developing skills because the practical part is lacking.

Recommendations were presented to improve the current entrepreneurship education programmes in secondary schools.

5.3.1 Recommendations for further research

The study focussed on one cluster which is predominantly black and thus findings cannot be generalised to all the schools in Nelson Mandela Metro pole Municipality. The Cronbach's alpha values for competitions (0.47) and entrepreneurial labour issues (0.43) are below acceptable levels for use in research. The research also focussed only on educators because of time constraints in dealing with minors. Future research could therefore assess whether the same findings will be achieved when learners are involved.

The aim of entrepreneurship education is to prepare learners who will exit from schools prepared for the job market. These learners will be job creators instead of job seekers and therefore contribute towards economic growth by reducing the unemployment rate. Unemployment is rising amongst the youth in the townships

and rural areas. The current study focussed on the Motherwell cluster and there is an opportunity to do a study in the other clusters and rural areas and compare with the present findings.

5.4 FINAL REFLECTION

The current study focussed at assessing the effectiveness of entrepreneurship education in developing skills and knowledge to school leavers. On the positive side, the study found out that entrepreneurship education is taught in secondary schools and some entrepreneurial skills are developed in learners. The problem encountered was the practical implementation of entrepreneurship skills which was still lacking. The training of educators in entrepreneurship education was also not taken as a priority by the Department of Education. This study concluded that teacher training should be prioritised and entrepreneurship should be offered as an optional subject to secondary school learners.

The recommendations were presented to help in improving the current entrepreneurship education programmes so as to equip learners with the skills and knowledge required in the work place. South Africa need to learn from global trends the various successful entrepreneurship education programmes.

5.5. CONCLUDING REMARKS

The entrepreneurship education is the key to encouraging economic growth and should be a priority in the education system of the secondary schools. Policy makers should make sure that policies that are developed encourage training of educators and practical implementation of entrepreneurship activities by learners. The involvement of all stakeholders' government, businesses, non- profit organisation, learners, educators and parents is important for the successful implementation of entrepreneurship education programmes. This can lead to economic growth and the reduction of unemployment which is good for the economy.

REFERENCE LIST

- Antonites,A.J.and Van Vuuren, J.J. 2005. Inducing entrepreneurial creativity, innovation and opportunity-finding skills.pp.255-271.[Accessed 18 June 2012].
- Athayde, R. 2009 .Measuring Enterprise Potential in Young People. Entrepreneurship Theory and Practice. pp. 481-500.
- Awasthi, D. 2011. Approaches to Entrepreneurship Development: The Indian Experience. Journal of Global Entrepreneurship Research. Volume 1(1) pp. 107-124.
- Awogbenie, A. C. and Iwuamadi, K. C. 2010. Youth unemployment: Entrepreneurship development programme as an intervention mechanism. African Journal of Business Management. Volume 4(6) pp. 831-835.
- Beeka, B. and Rimmington, M. 2011. Entrepreneurship as a career option for African Youths.Journal of Developmental Entrepreneurship.Volume 16 (1) pp.145-164.
- Binks, M. Starkey, K. and Mahon, C. L. 2006. Entrepreneurship Education and the Business School.Technology Analysis and Strategic Management. Volume 18 (1) pp.1-18.
- Blumberg, B., Cooper, D. and Schindler, P.S. 2005. Business Research Methods. Berkshire: McGraw-Hill.
- Borland Jr, K.W. 2001. Qualitative and Quantitative Research: A Complementary Balance. New Directions for Institutional Research. No 112 pp.5- 13.
- Borrego, M. Douglas, E.P. and Amelink, C.T. 2009 Quantitative, Qualitative, and Mixed Research Methods in Engineering Education. Journal of Engineering Education. pp. 53-66.
- Brand, V. 2008 .Empirical Business Ethics Research and Paradigm Analysis. Journal of Business Ethics No 86 pp.429-449.

- Brijlal, P. 2011. Entrepreneurial perception and knowledge: A survey of final year university students. African Journal of Business Management. Volume 5(3) pp.818-825.
- Cheung ,C.K. 2008. Entrepreneurship education in Hong Kong's secondary curriculum.Possibilities and Limitations. Education and training. Volume 50(6) pp. 500-515.
- Cheung, C. and Au, E. 2010. Running a small business by students in a secondary school: its impact on learning about entrepreneurship. Journal of Entrepreneurship Education. Volume 13 pp. 45-63.
- Chua,B. 2002. Entrepreneurship in Hong Kong: Revitalizing entrepreneurship. pp. 1-21 [Accessed 18 May 2012].
- Collis, J.and Hussey, R. 2009. Business Research: A Practical Guide for Undergraduate and Postgraduate students. Third Edition. New York: Palgrave Macmillan.
- Cowley, P. 2007. Bringing Education into the Market place: Part 11-Duplicating Successful Schools. Fraser Forum.pp.13-16 [Accessed 18 June 2012].
- Cowling, M. 2009. The Impact of Entrepreneurship Training and Small Business Experience on Future Entrepreneurial Activity in the UK. IES Working Paper pp 1- 30.[Accessed 19 March 2013]
- Csapo, K. and Pethoe, A. 2006. Teaching Entrepreneurship in Hungary. Hungary: Corvinus University of Budapest. pp.1-11. [Accessed 20 June 2012].
- De Rezende, T.L. and Christensen, J.D. 2009. Supporting Entrepreneurship Education: A report on the Global Outreach of the ILO's Know About Business programme. Geneva: Internal Labour Office. pp.3-61 [Accessed 18 June 2012]
- Entrepreneurship Education. 2010. Entrepreneurial Domains. pp. 63-73 [Accessed 20 March 2012].

- European Commission. 2012. Effects and impact of entrepreneurship programmes in higher education. pp 5-86 [Accessed 18 March 2013].
- Evans, J.R. Statistics 2010. Data Analysis and Decision Modelling. Fourth Edition. New Jersey: Pearson Education Inc.
- Evaluation of Programmes Concerning Education for Entrepreneurship. 2009 OECD Centre for Entrepreneurship, SME and Local Development. pp.1-72. [Accessed on 15 June 2012].
- Fillis, I. and Rentscher, R. 2010. The Role of Creativity in Entrepreneurship. Journal of Enterprising Culture. Volume 18 (1) pp. 49-81.
- Fisher, E. 2010. The State of Entrepreneurship in Canada. February 2010. pp. 1-29. [Accessed 14 June 2012].
- Frank, A. I. 2007. Entrepreneurship and Enterprise Skills: A Missing Element of Planning Education? Planning, Practice and Research. Volume 22 (4) pp.635-648.
- Ghazzawi, I. 2010. The next generation of Entrepreneurs: A reflection of a college outreach business programme for high school students. Journal of Entrepreneurship Education. Volume 13. pp9-35.
- Gibb, A. 2007. Enterprise in Education: Educating Tomorrows Entrepreneurs. pp.1-19. [Accessed 20 June 2012].
- Gliem, J.A. and Gliem, R.R. 2003. Calculating, Interpreting and Reporting Cronbach's Alpha Reliability Coefficient for Likert-Type Scales. pp.82-88. [Accessed 15 August 2012].
- Herrington, M., Kew, J., and Kew, P. 2009. Tracking Entrepreneurship in South Africa: A GEM Perspective. [Accessed 12 April 2012].
- Horn, G. 2006. Educational solutions to improve the employability of senior high school learners. South African Journal of Education. Volume 26 (1) pp.113-128.

- Isaacs, E., Visser, K., Friedrich, C. and Brijlal, P. 2007. Entrepreneurship Education and Training (FET) level in South Africa. South African Journal of Education. Volume 27 pp.613-629.
- Izedonmi, P.F. and Okafor, C. 2010. The Effect of Entrepreneurship Education on Student's Entrepreneurial Intentions. Global Journal of Management and Business Research. Volume 10(6).pp. 49-60.
- Jones, B. and Iredale, N.2006. Developing an Entrepreneurial life skills summer school. Innovation in Education and Teaching International. Volume 43 (3) pp.233-244.
- Jyothi, P. 2009. Revisiting Linkages between Entrepreneurship and Higher Education. Advances in Management. Volume 2 (10) pp.39-43.
- Kee, J., Rodrigues, P., Kundu, S. and Racine, J. L. 2008. Entrepreneurship curriculum. Project Report for JIP Grant.[Accessed 16 June 2012].
- Kirkwood,J. and Campbell-Hunt, C. 2007. Using Multiple Paradigm Research Methodologies to gain new insights into Entrepreneurial motivations. Journal of Enterprising Culture.Volume 15(3) pp.219-241.
- Kuratko, D.F. and Hodgetts, R. M. 2007 Entrepreneurship Theory, Process, Practice. Seventh Edition. Thomson Corporation. South – Western.
- Lazenby, J.A.A. and Machaba, R.P. 2011. A Descriptive Analysis of Gauteng Entrepreneurs with respect to the old debate of whether entrepreneurship is an inborn quality or can be learnt. International Journal of Business and Social Science. Volume 2(21) pp.72-80.
- Leffler, E., Svedberg, G. and Botha, M. 2010. A global entrepreneurship wind is supporting or obstructing democracy in schools: A comparative study in the North and the South. Education Inquiry. Volume 1(4) pp.309-328.
- Lewis, K. Massey, C. 2003. Delivering enterprise education in New Zealand. Education and Training. Volume 45 (4) pp.197-206
- Lepoutre, J.,Van Den Berghe, W. Tilleuil, O. and Cruns, H.C. 2010. A New Approach to Testing the Effects of Entrepreneurship Education Among

- Secondary School Pupils. Vlerick Leuven Gent Working Paper Series.pp.1-27.
- Molapo, D. 2002. If you're not growing you're dying: Lessons from eagles. Second Edition. Fourways: I can Foundation.
- Martinez, A. C., Levie, J., Kelley, D. J., Saemundsson, R. J. and Schott, T. 2010. Global Entrepreneurship Monitor Special Report. [Accessed 18 May 2012].
- Millman, C., Matlay, H. and Liu, F. 2008. Entrepreneurship education in China: a case study approach. Journal of Small Business and Enterprise Development, Volume 15 (4) pp.802-815.
- Nicolaides, A. 2011 Entrepreneurship- the role of higher education in South Africa. Educational Research.Volume 2(4).pp. 1043-1050.[Accessed on 3 June 2011].
- Nieuwenhuizen, C. and Groenewald, D. 2008. Entrepreneurs' Learning Preferences: A Guide for Entrepreneurship. Education_ActaCommerci Volume 8.pp. 128-144.
- Pena, V., Transue, M., Riggieri, A. Shipp, S. and Van Atta. 2010. A Survey of Entrepreneurship Education Initiatives. Alexandria: Institute for Defence Analysis.pp.1-54.
- Pihie, Z.A.L. and Bagheri, A. 2011. Malay Students' Entrepreneurial Attitude and Entrepreneurial Efficacy in Vocational and Technical Secondary Schools of Malaysia.Petanika. Journal of Social Sciences and Human Resources. Volume 19(2).pp. 433-447.
- Plumy, W.L., Marshall, L.L., Eastman, J., Iyer, R., Stanley, K.L. and Boatwright, J. 2008. Developing Entrepreneurial Competencies: A Student Business. Journal of Entrepreneurship Education. Volume 11 pp.17-28.
- Pretorius, M. and Wlodarezyk, T. 2007 Entrepreneurial Training Curriculum Assessment: The Case of New Venture Creation Learnership. South African Journal of Economic and Management Sciences. Volume 10(2) pp 504-529.

- Ramanigopal, C.S., Palaniappan, G. and Hemalatha, N. 2012 Need for entrepreneurship education in school students. Journal of Physical and Social Sciences. Volume 2(3).pp. 243-259.
- Raposo, M. and Do Paco, A. 2011. Entrepreneurship Education: Relationship between education and entrepreneurial activity. pp.453-457. [Accessed 18 June 2012].
- Sathorar, H. H. 2009. Masters Treatise Unpublished. [Accessed 10 February 2012].
- Smith, P. and Salazar-Xirinachs, J.M. 2006. Towards an Entrepreneurial Culture for the twenty first century. pp. 1-133 [Accessed 16 June 2012].
- Steenekamp, A. G., Van der Merwe, S.P. and Athayde, R. 2011. An investigation into youth entrepreneurship in selected South African secondary schools: An exploratory study. Southern African Business Review. Volume 15(3).pp. 46-75.
- Timmons, J.A. and Spinelli, Jr. S. 2009. New Venture Creation: Entrepreneurship for the 21st Century. Eight Edition. New York: McGraw-Hill.
- Toloie-Eshlaghy, A. Chitsaz, S., Karimian, L. and Charkhchi, R. 2011. A classification of Qualitative Research Methods. Research Journal of International Studies. Volume 20.pp 106-123.
- Vaidya, S. 2007. Developing Entrepreneurial Life Skills: An Experiment in Indian Schools. Institute for Small Business and Entrepreneurship. pp. 1-17.
- Van Aardt, I., Van Aardt, C. and Bezuidenhout, S. 2000. Entrepreneurship and New Venture Management. Second Edition. Cape Town: Oxford University Press.
- Venkatachalam, V. B., and Waqif, A.A. 2005. Outlook on Integrating Entrepreneurship in Management Education in India. Decision. Volume 32 (2) pp.57-71).

- Vetrivel, S. C. 2010. Entrepreneurship and Education: A Missing Key in Development Theory and Practice. Advances in Management. Volume 3(8) pp.18-22.
- Weber, R. Von Graevenitz, G. and Harhoff, D. 2009. The Effects of Entrepreneurship Education.Governance and the Efficiency of Economic Systems. Discussion Paper No. 269. pp.1-46
- Youth Parliament. 2010. Enquiry into should entrepreneurship education be compulsory subject in secondary school?pp.1-8. [Accessed 15 June 2012].
- Zimmerer, T. W. and Scarborough, N.M. 2002. Essentials of Entrepreneurship and Small Business Management. Third Edition. New Jersey: Pearson Education Inc.
- www.businesslive.co. The rate of unemployment in South Africa.[Accessed 8 May 2012].
- www.entre.ed.org: National Content Standards for Entrepreneurship Education. [Accessed 16 May 2012]
- www.ideas.repec.org; Entrepreneurship Education and Research: Emerging Trends and Concerns. [Accessed 8 June 2012].
- www.ilo.org; Supporting Entrepreneurship Education: A report on the Global Outreach of the ILO's Know About Business Programme. [Accessed 16 May 2012].
- www.nelsonmandelabay.gov.za. Integrated Development Plan 2008-2012 of the Nelson Mandela Bay Metropole Municipality. [Accessed 10 March 2012].
- www.nfte.com. Youth Entrepreneurship Education in America: A Policymaker's Action Guide. [Accessed 15 April 2012].
- www.saie.learningphilosophy.htm; Entrepreneurship Education. [Accessed 13 March 2013].
- www.sbaer.uca.edu.Enterprising Approach in Hungarian Primary and Secondary Schools. [Accessed 27 April 2012].

www.weforum.org; Educating the Next Wave of Entrepreneurs: Unlocking entrepreneurial capabilities to meet the global challenges of the 21st Century. [Accessed 18 May 2012].

www.weforum.org; Unlocking entrepreneurial capabilities to meet the global challenges of the 21st Century. [Accessed 18 May 2012].

www.wikipedia.org; Entrepreneurship education. [Accessed 12 April 2012].

ANNEXURE A

THE QUESTIONNAIRE COVERING LETTER

14 July 2012

Dear Respondent

REQUEST PARTICIPATION IN RESEARCH STUDY

Research is being conducted to determine the effectiveness of the entrepreneurship education programme in the current FET curriculum in developing entrepreneurial knowledge and establishing entrepreneurial skills in our school leavers. This research is being conducted as part of a MBA Treatise at the NMMU Business School.

The research is confined to the Nelson Mandela Bay Municipality and will require secondary schools from the Motherwell township schools to assist with data collection. The researcher hereby wishes to request the participation of your school in the study.

It will require the educators involved in the teaching of Commercial subjects to complete questionnaire posing questions on entrepreneurship knowledge.

Your assistance in this matter will be highly appreciated.

We hope that this request will receive your favourable approval.

Thank you.

Mrs Nomonde Qoto

Dr Margaret Cullen

MBA Student- Business School

Supervisor

ANNEXURE B

SCHOOL PROFILE

SCHOOL PROFILE

NO	QUESTION	ANSWER
1.	Number of teachers	
2.	Number of commerce teachers	
3.	Number of physical classes available to teach in	
4.	Total number of learners in the FET phase (Grade 10-12)	
5.	No. of commerce learners in the FET phase	
6.	Total number of learners	
7.	Total number of Grade 12 commerce learners	

ANNEXURE C

COVER LETTER EXPLAINING THE PURPOSE OF THE QUESTIONNAIRE TO RESPONDENTS

Dear Respondent

RESEARCH QUESTIONNAIRE

Research is being conducted to determine the effectiveness of the current entrepreneurship education offered at secondary schools in Grade 10-12 level in the Motherwell township schools of the Eastern Cape. This research is being conducted as part of a MBA Treatise at the NMMU Business School.

You are hereby requested to assist in the attempt to collect information in this regard. The questions would take 15 minutes of your time and answers will be used to improve the current entrepreneurship education offered at secondary schools in Grade 10-12 curriculum.

Questionnaire is filled in anonymously and the information supplied will be treated as confidential. Please express your honest opinions so as help the researcher.

Thank you very much for your assistance.

Yours faithfully

Mrs Nomonde Qoto (The Researcher, MBA Student)

ANNEXURE D

QUESTIONNAIRE FOR TEACHERS

Dear Respondent

Please complete the following questions.

Thank you.

SECTION A: DEMOGRAPHICS

CLASSIFICATION DATA

Please make a cross (X) or enter the relevant information in the blocks provided.

Please indicate your TITLE

Mr	Miss	Mrs
----	------	-----

GENDER: Male ☐ Female ☐

AGE GROUP:	20 – 29	30 – 39	40 – 49	50 – 59	60+
------------	---------	---------	---------	---------	-----

Please indicate your FIRST LANGUAGE

Xhosa	English	Afrikaans
-------	---------	-----------

Please indicate your HIGHEST EDUCATIONAL QUALIFICATION

Matric	Teacher's Diploma	Professional Degree	Post Graduate
--------	-------------------	---------------------	---------------

Please indicate your JOB TITLE:

Educator	HOD	Senior Teacher	Deputy Principal
----------	-----	----------------	------------------

How long have you been working for your institution (in years?)

LESS THAN 5 YEARS	5 – 9	10– 14	15 – 19	20 +
-------------------	-------	--------	---------	------

How many years of EXPERIENCE do you have in teaching Business Studies?

LESS THAN 5 YEARS	5 – 9	10– 14	15 – 19	20 +
-------------------	-------	--------	---------	------

Please indicate your POPULATION GROUP

Black	Coloured	Indian	White
-------	----------	--------	-------

SECTION B: BASIC SKILLS, FINANCIAL AND BUSINESS

Please answer the questions as accurately as possible. For each statement, tick the number which best describes your experience. For example if you strongly agree with the statement, tick the number 5 and if you strongly disagree with the statement, tick the number 1. Tick only one answer for each statement, but answer ALL QUESTIONS please.

No.	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1F1	Learners are encouraged to achieve by offering rewards for good performance					
2F1	Learners are taught to do mission statement for their businesses	1	2	3	4	5
3F6	Learners are taught to do vision for their business	1	2	3	4	5
4F3	Competitions are done in school and prizes given to encourage learners to do their activities	1	2	3	4	5
5F6	The learners are taught labour issues concerning employment of workers	1	2	3	4	5
6F1	Learners are taught how to generate ideas for their business by discussing them in class	1	2	3	4	5
7F1	Learners are taught how to prioritise the various ideas so as to see the viable opportunity for the business	1	2	3	4	5
8F3	The learners are encouraged to participate in business games like	1	2	3	4	5

	JSE Liberty Challenge					
9 F2	The learners are taught sales tactics	1	2	3	4	5
10 F2	The learners are taught pricing tactics	1	2	3	4	5
11 F4	The learners are taught about how to satisfy customers	1	2	3	4	5
12 F1	The learners are taught how to do start up planning by preparing a budget for short term and long term	1	2	3	4	5
13 F3	Competitions are done in regions and prizes given to learners to encourage them to excel in their business	1	2	3	4	5
14 F1	Learners are taught how to do their cash flow budget	1	2	3	4	5
15 F7	Learners are taught how to monitor their cash flow budget	1	2	3	4	5
16	Learners are taught how to do their business plans to request for funding	1	2	3	4	5
17 F2	Learners are taught how to present their business plans to funders	1	2	3	4	5
18 F7	Proper record keeping for the business is encouraged	1	2	3	4	5
19 -F5	The importance of keeping the correct ratio between own and borrowed capital is stressed	1	2	3	4	5
20 F1	Learners are taught that planning is the key in the business	1	2	3	4	5

21 F1	Learners are encouraged to follow their plans by checking and organising resources needed for the business	1	2	3	4	5
22 F7	Learners are taught that controlling everything in your business is important	1	2	3	4	5
23 F5	Learners are encouraged to control their plans and do adjustments when necessary	1	2	3	4	5
24 F5	Learners are encouraged to choose careers to be entrepreneurs	1	2	3	4	5
25 F4	Learners operate tuck-shops in school	1	2	3	4	5

26. Do you think that you are imparting basic skills, financial and business skills to learners in your school in methods that are not mentioned by the above statement? Yes or no, if yes

How?.....

.....

.....

.....

.....

.....

.....

...

SECTION C: CREATIVITY AND INNOVATION AND DESIRE FOR HIGHER EDUCATION

No.	Statement	Strongly Disagree				
27 F1	Creativity is encouraged by letting the learners do business plans for competitions	1	2	3	4	5
28 F1	Creativity is encouraged by offering tasks that encourage creative thinking	1	2	3	4	5
29 F1	Innovation is encouraged by letting learners operate simulated businesses during the school year	1	2	3	4	5
30 F3	Learners are given project on different careers in business	1	2	3	4	5
31 F1	Learners present their business plans in class	1	2	3	4	5
32 F3	Learners are able to link Business studies with Economics and Accounting	1	2	3	4	5
33 F2	Learners are interested to further their studies in Entrepreneurship	1	2	3	4	5
34 F2	Learners would prefer a career with financial stability	1	2	3	4	5
35 F2	Learners are able to identify the challenges facing businesses	1	2	3	4	5
36 F2	Learners are fully prepared for the doing Entrepreneurship in higher institutions	1	2	3	4	5

SECTION D: INVOLVEMENT OF LOCAL BUSINESS AND ORGANISATION

Answer the questions by selecting YES or NO

37. Local entrepreneurs are invited to the school to share their experiences with learners	YES 1	NO 2
38. Local entrepreneurs have programmes that invite learners to their businesses	1	2
39. Local organisations like Chamber of Commerce are invited to the school to address learners	1	2
40. Some of our learners are mentored by the local organisations	1	2
41. Local organisations and local entrepreneurs offer employment to learners during holidays	1	2

SECTION E:

Answer the following open ended question:

42. What are your views concerning risks of starting the business? Would you encourage your learners to start their own business?

Explain.....

.....

....

.....

.....

43. What are your views concerning the risks of using borrowed capital to finance your business?

Explain.....

.....

.....
.....

44. Do you have a vision for Entrepreneurship in South Africa?.....

.....
.....
.....

45. Are you following the traditional teaching method or have you changed to the interactive approach? What are the advantages?

.....
.....
.....
.....

46. Are you following the traditional teaching method or have you changed to the interactive approach? What are the disadvantages?

.....
.....
.....
.....

47. Would you encourage that a common body be formed that support all educators involved in Entrepreneurship education? Motivate

.....
.....
.....

.....

48. Must educators use the same textbooks? Motivate

.....

.....

.....

.....

49. Is the Department offering workshops and support to all educators teaching
Business Studies? Yes or no, if yes motivate

.....

.....

.....

.....

THANK YOU VERY MUCH FOR YOUR PARTICIPATION.