UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

SELF-EVALUATION OF PERCEIVED KNOWLEDGE AND SKILLS OF ECONOMIC AND MANAGEMENT SCIENCES TEACHERS IN SOUTH AFRICA

Makidiidi Blantina Mashiapata

Submitted in partial fulfillment of the requirements for the degree of Master of Philosophy in Entrepreneurship and Small Business Management.

Faculty of Economic and Management Sciences
University of Pretoria

Study leader: Dr I. Le Roux
Date Submitted: 30 June 2006

ACKNOWLEDGEMENTS

Glory to the Almighty God, who led my every step.
Proverbs 3:5-6 " Trust in the Lord with all your heart,
And lean not on your own understanding;
In all your ways acknowledge Him,
And He shall direct your paths".

There are many people to whom I am indebted for their assistance in the preparation of this project.

- Dr. Ingrid le Roux for her patience, calm and helpful attitude that guided and encouraged me throughout this project.
- The Chair of Entrepreneurship at the University of Pretoria and the Stats Department for such a wealth of knowledge I obtained.
- And finally to my family Jackie, Keamogetsoe, Thoriso and Refentse for giving me the time, freedom and necessary support I needed to complete this project and to all the people who made a contribution to my success. May God richly bless you all.

DECLARATION

I, Makidiidi Blantina Mashiapata, declare that this dissertation is my own work, unless otherwise indicated. It is being submitted in partial fulfillment of the requirements for the degree: **Master of Philosophy in Entrepreneurship and Small Business Management-University of Pretoria. Furthermore, I declare that it has not been previously submitted to any other Institute or University.**

…… ……

MB Mashiapata **Date**

ABSTRACT

This study outlines the importance of entrepreneurship in developing and growing the economy. South Africa is low in entrepreneurial activity when compared to other developing countries. Considering South Africa's high poverty and unemployment rates, retrenchments, downsizing of big businesses, high failure rate among start-ups, and the valuable contribution that effective entrepreneurship can make towards economic growth and development. It becomes very important to determine how entrepreneurship can be encouraged and promoted to yield the desired results. The key lever to increasing the pool of entrepreneurs is through education. The answer that is evident is that entrepreneurship education should be taught in schools.

The South African curriculum has made provision for the teaching of entrepreneurship from an early age. There is a widespread idea that entrepreneurship education would generate more and better entrepreneurs than there have been in the past and that education would increase the chances of obtaining entrepreneurial success. To achieve this, the study attempted to find out about the status of the Economic and Management Sciences (EMS) teachers, whether they have the necessary knowledge and skills to produce learners with an entrepreneurial inclination or not. Again the study attempted to find out whether teachers would like to be trained or not. The results revealed that teachers do not have the necessary knowledge and skills to implement the EMS Learning Area and need to be trained.

The study addresses the importance of training teachers in EMS and the principles of entrepreneurship. The goal is to provide teachers with the rationale, mindset, tools, skills and knowledge needed to infuse the spirit of entrepreneurship into classrooms and to expand entrepreneurial career options. Knowledgeable teachers are needed to bridge the gap between the content on paper and the actual transference of the entrepreneurial skills and attitude to the learner in order to raise South Africa's rate of entrepreneurial activity. Education and training should be improved so that the supply of people equipped to become entrepreneurs is increased.

TABLE OF CONTENT

CHAPTER CONTENTS PAGE

1	ACKNOWLEDGEMENT		2
2	ABSTRACT		3
CHAPTER 1			
	INTRODUCTION, BACKGROUND AND LITERATURE		12
1.1		Introduction	12
1.2		Background to study	14
1.3		Literature	21
	1.3.1	Entrepreneurship Education as outlined by the South African Curriculum	21
	1.3.2	Challenges faced in the implementation of entrepreneurship education in schools in South Africa Grade R-9	22
	1.3.3	Curriculum responsiveness to societal interests and needs	27
	1.3.4	Training teachers in Entrepreneurship Education	27
	1.3.5	Entrepreneurship Education Training that is already going on in South Africa	33
1.4		Teacher perception	35
1.5		Conclusion	36
CHAPTER 2			
2	**PROBLEM STATEMENT, HYPOTHESIS AND RESEARCH METHODOLOGY**		38
2.1		Introduction	38
2.2		Problem Statement	38
2.3		Hypothesis	38
2.4		Research, methodology, data collection	40
	2.4.1	Research methodology	40
	2.4.2	Data and sample decision	41
	2.4.2.1	Data required	41

	2.4.2.2	Method of data collection	42
	2.4.3	Data Analysis	44
	2.4.3.1	Analysis of qualitative data	45
	2.4.3.2	Analysis of quantitative data	46
	2.4.4	Item Analysis	47
	2.4.5	Analysis of variance (ANOVA)	48
2.5		Objectives and contribution of the research	48
	2.5.1	Objectives	48
	2.5.2	Contribution of the research	49
2.6		Conclusion	49
CHAPTER 3			
3		**FINDINGS**	50
3.1		Introduction	50
3.2		Descriptive data: demographics	50
	3.2.1	Gender	50
	3.2.2	Race	51
	3.2.3	Age	51
	3.2.4	Highest level of education	52
	3.2.5	Highest level of exposure of EMS knowledge or commercial subjects	53
	3.2.6	EMS/Commercial Subjects exposed to in own studies	53
	3.2.7	Reason for teaching EMS	54
	3.2.8	Grades taught	56
3.3		Item Analysis	57
	3.3.1	Ability to teach EMS	57
	3.3.2	Mastery of LO 1: Economic Cycle	58
	3.3.3	Mastery of LO 2: Sustainable growth and development	59
	3.3.4	Mastery of LO 3: Managerial, consumer and financial knowledge and skills	59
	3.3.5	Mastery of LO 4: Entrepreneurial knowledge and	60

		skills	
	3.3.6	Training	62
3.4	3.4.1	Item Analysis of constructs	63
	3.4.2	Scale Intercorrelations for constructs	63
	3.4.3	In your opinion entrepreneurship means	64
	3.4.4	In your opinion productivity means	65
	3.4.5	In your opinion, what do you think should be done to make the implementation of EMS effective in South African schools (to make the teachers to teach EMS with confidence and passion) entrepreneurship means	66
	3.4.6	In your opinion, what type of training in EMS will appeal more to teachers	68
	3.4.7	In your opinion, what type of skills do EMS teachers need for the effective implementation of EMS Learning Area	70
	3.4.8	In your opinion, what type of knowledge do EMS teachers need for the effective implementation of EMS Learning Area	71
	3.4.9	What type of limitations do you experience in the implementation of EMS Learning Area (Name five and prioritise from most limiting)	72
3.5		Analysis of variance	74
	3.5.1	Perception of own ability to teach EMS	74
	3.5.2	Perception of knowledge and skills to teach Learning Outcome 1: The Economic Cycle	75
	3.5.3	Perception of knowledge and skills to teach Learning Outcome 2: Sustainable growth and development	76
	3.5.4	Perception of knowledge and skills to teach Learning Outcome 3: Managerial, consumer and financial knowledge and skills	77
	3.5.5	Perception of knowledge and skills to teach	78

		Learning Outcome 4: Entrepreneurial knowledge and skills	
	3.5.6	Perception of teachers need for training	79
3.6		Conclusion	79
CHAPTER 4			
4	**DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS**		81
4.1		Discussions	81
	4.1.1	Highest level of exposure of EMS knowledge or commercial subjects	81
	4.1.2	Reasons for teaching EMS	81
	4.1.3	Analysis of the teachers' ability to teach EMS	82
	4.1.4	Analysis of mastery of Learning Outcomes 1- LO 4	82
	4.1.5	Analysis of EMS teacher training needs	84
	4.1.6	Analysis of an explanation of entrepreneurship construct	84
	4.1.7	Analysis of an explanation of productivity construct	85
	4.1.8	Analysis of respondents' opinion on what should be done to make the implementation of EMS effective in South Africa	85
	4.1.9	Analysis of respondents' opinion on the type of training that will appeal to EMS teachers	86
	4.1.10	Analysis of respondents' opinion on the type of skills EMS teachers need for the effective implementation of EMS Learning Area	86
	4.1.11	Analysis of respondents' opinion on the type of knowledge EMS teachers need for the effective implementation of EMS Learning Area	87
	4.1.12	Analysis of respondents' opinions on the type of limitations they experience in the implementation of EMS Learning Area	87

	4.1.13	Analysis of the results of ANOVA for EMS Learning Outcome 1 and 2	90
	4.1.14	Analysis of the results of ANOVA for EMS Learning Outcome 4	90
4.2		Conclusion	90
4.3		Shortcomings of the study	93
4.4		Recommendations	93
	4.4.1	There is need to train EMS teachers for the effective implementation of the Learning Area	94
	4.4.2	There is need for the Department of Education to develop partnerships with other stakeholders	94
	4.4.3	There is need to realize that entrepreneurship is only compulsory in GET	95
	4.4.4	There is need to develop EMS Teacher Support Materials	95
	4.4.5	There is need for organisations to be involved in Entrepreneurship Education to improve teachers' performance	96
	4.4.6	Effort to upgrade teachers' qualifications	96
4.5		The type of training that the EMS teachers need	96
		References	98
		Annexure 1	104

LIST OF TABLES

1.1	Summary of knowledge and skills needed in General Education and Training	22
1.2	Selected entrepreneurship training programmes in South Africa	33
3.1	Gender distribution	50
3.2	Race distribution	51
3.3	Age distribution	51
3.4	Highest level of education	52
3.5	Highest level of exposure to EMS/Commercial subjects	53
3.6	EMS/Commercial subjects exposed in own studies	54
3.7	Reason for teaching EMS	55
3.8	Grades taught	55
3.9	Ability to teach EMS	56
3.10	Mastery of Learning Outcome 1: Economic cycle	57
3.11	Mastery of Learning Outcome 2: Sustainable growth and development	58
3.12	Mastery of Learning Outcome 3:Managerial, consumer and financial knowledge and skills	59
3.13	Mastery of Learning Outcome 4: Entrepreneurial knowledge and skills	60
3.14	Training needs of EMS teachers	62
3.15	Item analysis for constructs	63
3.16	Scale intercorrelations	63
3.17	Own opinion about what entrepreneurship means	64
3.18	Own opinion about what productivity means	65
3.19	What should be done to make implementation of EMS effective	66
3.20	The type of training that will appeal to EMS teachers	68
3.21	Type of skills that EMS teachers need to implement the Learning Are effectively	70
3.22	Type of knowledge that EMS teachers need to	72

	implement the Learning Are effectively	
3.23	Limitations experienced by teachers in implementing EMS	72
3.24	ANOVA for perception of own ability to teach EMS	74
3.25	Results of ANOVA for EMS Learning Outcome 1: Economic Cycle	75
3.26	Results of ANOVA for EMS Learning Outcome 2: Sustainable growth and development	76
3.27	Results of ANOVA for EMS Learning Outcome 3:Managerial, consumer and financial knowledge and skills	77
3.28	Results of ANOVA for EMS Learning Outcome 4: Entrepreneurial knowledge and skills	78
3.29	Results of ANOVA for training	79

TABLE OF ACRONYMS

1	ACE	Advanced Certificate of Education
2	ANOVA	Analysis of variance
	AS	Assessment Standard
3	DoE	Department of Education
4	EMS	Economic and Management Sciences
	FDI	Foreign Direct Investment
5	FET	Further Education and Training
6	GET	General Education and Training
7	Grade R	Grade Reception year
8	Ha	Alternative hypothesis
9	Ho	Hypothesis
10	HEI	Higher Education Institution
11	HOD	Head of Department
12	LA	Learning Area
13	LO	Learning Outcome
14	LTSM	Learning and Teaching Support Materials
15	NCS	National Curriculum Statement
16	NGO	Non Governmental Organisation
17	NQF	National Qualification Framework
18	OBE	Outcomes Based Education
19	SAIE	South African Institute of Entrepreneurship
20	SWOT	Strengths, Weaknesses, Opportunities and Threats
21	TEA	Total Entrepreneurial Activity

CHAPTER 1
INTRODUCTION, BACKROUND AND LITERATURE

1. INTRODUCTION, BACKGROUND AND LITERATURE

1.1 Introduction

According to Driver, Wood, Segal and Herrington (2001:5) the concept and practice of entrepreneurship have received increasing emphasis internationally in the last decade. A shift in thinking has placed entrepreneurship at the centre of attempts to understand the forces that drive economic growth. This differs from previous emphases on, for example, productivity, technology and large established firms. While the relationship between entrepreneurship and economic growth is multi-faceted and complex, the fact that entrepreneurial capability is a necessary ingredient in a country's capacity to sustain economic growth is beyond dispute. Foxcroft, Wood, Kew, Herrington and Segal (2002:10) recognise the contribution of entrepreneurial activity to economic growth. Driver et al (2001:49) also postulate that the impact of entrepreneurial activity on economic growth is largely via those firms that survive to become new firms and continue to grow thereafter. It is not only these authors but also many researchers around the globe who agree that there is a link between entrepreneurship and economic growth and development.

Policy makers around the globe have seen the affect of entrepreneurship on economic growth and have reacted by making it a focus of social and political activity. It has been found that entrepreneurship is strongly associated with economic growth at a global level (Timmons & Spinelli, 2004:15).

The focus on entrepreneurship reflects the significant economic contributions in terms of employment, job and wealth creation that are now attributed to entrepreneurial firms (Bell, Callaghan, Demick & Scharf, 2004:1), Gibb, (1996) in Kirby, 2004:2). Kuratko and Hodgetts (1998:10) also postulated that both the economic and social influence of entrepreneurs has by far the largest impact on job creation, innovation and economic renewal compared to the formal sectors

world-wide (Antonites & van Vuuren, 2004:1). These entrepreneurs are deemed to possess particular attributes that include a willingness to take calculated risks, a propensity to innovate and determination to succeed in the face of what often appear to be insurmountable odds. The current focus of attention of many public–policy initiatives is on stimulating the formation and development of entrepreneurial firms fostering entrepreneurial activity (Bell et al., 2004:1). Fortunately there is now an increasing consensus within South Africa about the importance of entrepreneurship in economic development. Although there have been significant steps taken towards increasing the level of entrepreneurial activity in South Africa, many challenges lie ahead (Foxtrot et al., 2002:4).

Given South Africa's high poverty and unemployment rates, skewed income distribution and potential high contribution that effective entrepreneurship can make towards employment and economic growth, it is vital to determine how entrepreneurship can be effectively encouraged. The important question is; how can this critical input be optimally developed to secure the maximum benefits to the South African economy (Burger, O'Neill & Mahadea, 2005:1).

It is evident that the only answer will be to teach entrepreneurship education in schools. When learners are oriented into entrepreneurship from an early age, it becomes easier when they have their own entrepreneurial ventures (Nieuwenhuizen & Groenewald, 2004:1). Ibrahim and Soufani (2002:247) argued that most entrepreneurial traits could be predicted in individuals early in life. The ability to predict entrepreneurial traits draws attention to the significant role of entrepreneurship training and development in pre and early adulthood (Nieuwenhuizen & Groenewald, 2004:1). Driver et al (2001:49) and (Foxtrot et al., 2002:4) have consistently highlighted the fundamental importance of education equipping people with the skills and attitudes needed to be entrepreneurs. The education system plays an important role in developing entrepreneurial skills and shaping attitudes in several ways, since they are ideally placed to influence entrepreneurial attributes from an early age (Orford et al, 2004,52; Henry, Hill & Leitch, 2003:91).

The key to the success of establishing a culture of entrepreneurship in South Africa is education. However that will depend on all stakeholders including the state, teachers, parents and the learners themselves (Gouws, 2002:1).
The aim of this study is to:

- State the challenges faced in the implementation of entrepreneurship education in South Africa
- Determine whether teachers have mastery of EMS Learning Outcomes as stipulated in the National Curriculum Statement
- Determine the perceived knowledge and the skills that teachers need for the effective implementation of entrepreneurship education
- Emphasise the need to train and support all EMS teachers in Entrepreneurship Education
- Give advice on the type of training the EMS teachers need in South Africa for the effective implementation of the Learning Area

1.2 Background to study

The priority in South Africa for every stakeholder should be to stimulate entrepreneurship. Once entrepreneurship is stimulated, it is a process that will go on because entrepreneurship in itself often generates more entrepreneurship, so that economic development is a process that can be kept in motion. Every entrepreneurial act of discovery generates at least some unintended consequences, including the creation of new value scales (i.e. unexpected changes in consumer tastes) and new technologies, so that each entrepreneurial action has the potential to create new markets for new goods and services (Harper, 2002:2) contributing to economic growth.

A prominent feature of a competitive enterprise economy is the ability of people continually to seek out and seize opportunities for profitable new activities in local and world markets. Encouraging and releasing people's entrepreneurial energies is an essential key to the achievement of greater economic prosperity in a country and to the continuing regeneration of its economy over time.

Indeed, the economics of entrepreneurial discovery should be the hub of the economics of growth and development (Harper, 2002:1).

There are not enough people in South Africa who have the orientation and skills to create new businesses. Although strong emphasis has been placed on entrepreneurship education in tertiary institutions since the early nineties, this way of opportunity-oriented thinking cannot be comprehended in exposure to one semester course of entrepreneurship (Kroon & Meyer, 2001:1). With many big businesses downsizing, widespread job loss, associated high unemployment rates, social ills and poverty-stricken communities, lead many people who are retrenched to start their own small businesses in order to survive. But a lack of experience, start-up capital and entrepreneurial knowledge causes many of these businesses to fail (Ladzani & Groenewald, 2005: 1).

According to Driver et al (2001:15) South Africa has a lower survival rate amongst start-ups than is typical internationally. Which leads to one of South Africa's greatest limitations to economic development being definitely the shortage of entrepreneurs. The ratio of entrepreneurs to other workers in South Africa is currently 1:52, while the ratio in most developed countries is 1:10 (Gouws, 2002:2). South Africa 's low entrepreneurial activity is one of the major causes why the inflow of Foreign Direct Investment (FDI) was not as expected despite all the endeavours to attract them. It is argued that the majority of cross border investment is in the form of mergers and acquisitions rather than green-field investments. This lower percentage simply reflects the fact that there are fewer target firms to acquire in developing countries like South Africa (Hill, 2003:211).

Another reason for the slow inflow of FDI is that the labour market lacks skills and is not particularly productive. Extensive training, however, is often required from basic literacy to skilled technical training. Technical qualifications are lacking (Ramakrishnan, 2000:30). For South Africa to achieve sufficient economic growth there is dire need for human development strategies aimed at skills development in order to attract the levels of FDI. Sound intellectual

property protection will also positively influence the investment decisions of potential investors (Naude & Krugell, 2003:1). It is important to realize that in the past unskilled labour was an advantage, but today economic development is dependent on a higher proportion of skilled labour owing to the increased complexity of technology employed in the production process. It is not surprising that the World Competitiveness Report (IMD) ranks South Africa last (49th) in economic literacy, brain drain and interest in Science and Technology, 46th in finance skills, 47th in skilled labour availability and 48th in Science not adequately taught in schools. Overall these are poor rankings. The low level of financial literacy may well be the reason for the poor survival rate of our entrepreneurial ventures (Foxtrot et al., 2002:48).

The problem that still exists is that entrepreneurship in South Africa does not hold a strong position and, in fact, is generally approached with some degree of contempt. One of the main problem areas in the field is the role of education and training in the generation of entrepreneurial activity. Orford, Wood, Fischer, Herrington & Segal, (2003) provide unquestionable evidence regarding the importance of entrepreneurship and training (Antonites & van Vuuren, 2004:1). According to Orford et al (2003), South Africa's TEA index is 6.54, which means that just over six out of every 100 adults in South Africa are entrepreneurs (Le Roux, 2004:2). In 2004 the Total Entrepreneurial Activity (TEA) index in South Africa was 5.4% compared to an average of 9.4% in all 34 countries included in the 2004 survey and 21.0% in the developing countries included in the 2004 survey. This provides confirmation that South Africa has a relatively low TEA rate compared to the other countries included in the study (Orford, Herrington & Wood, 2004:52).

It is a clear confirmation that we need a national effort to improve the quality of education offered to the majority of South Africans. Within this national effort there needs to be a special emphasis on the delivery of quality Maths and Science education (Orford et al., 2004:52), as well as Entrepreneurship Education. Education is an environment that reaches the youth of a country for many years and can really bring a real influence in their lives in shaping their future. Teachers are people who spent most of the time with the youth of the

country. If teachers are well trained and can deliver Entrepreneurship Education with passion, South Africa will in the long run see the impact of entrepreneurship in the lives of all citizens. Orford et al (2004:34) argue that the education system plays an important role in developing entrepreneurial skills and shaping attitudes in several ways. . Effective schooling should provide crucial skills in verbal and written communication and in Numeracy and in subjects like Entrepreneurship, Economics, and Accounting. Schools also can play an important role in shaping learner attitudes in more subtle ways, for example in the areas of work ethic, career goals and expectations, and their outlook toward tertiary education (Orford et al., 2004:34).

The three most frequently identified factors limiting entrepreneurial activity in South Africa are human capital (this includes the ability of the education and training system to develop the skills and mindsets needed for entrepreneurship and the 'potential of the population' for entrepreneurship), financial support and government policies and programmes. Together these three factors account for 70% of the limiting factors identified by the South African experts (Orford et al., 2004:26). Inadequate supply of human capital also poses a problem for human and physical resources work in a complementary fashion.

Entrepreneurship is a mindset, which cannot be taught, but can be stimulated. A combination of a rounded education and exposure to entrepreneurship, from an early age, can help by encouraging children and young adults to think and behave more entrepreneurially and, ultimately, to consider ownership as a career option (Green paper, 2003:3). It is widely recognised that behavioural skills are mainly acquired during childhood and that they develop relatively little thereafter. Entrepreneurial awareness is rooted in the life period preceding entry into higher education (Brockhaus, Hills, Klandt & Welsh, 2001:137). Teachers should know that younger age children perform better than older ones in activities engaging in entrepreneurship, as they do not possess the fears and attitudes that we develop with maturity, so it makes a lot of sense to teach it earlier (Ashmore, 2001:1).

In order to stimulate self employment an appropriate climate for the development of the entrepreneurial orientation must be created which will result in a paradigm shift from job seeker to job creator. The earlier one starts with entrepreneurship education the better the result will be. In order to create an entrepreneurial society in general, and entrepreneurship education in particular, one must perforate every boundary to the play ground as cited by Hijort and Johannison, (1997:14) in (Le Roux, 2003:1). It is therefore essential to invest in teaching entrepreneurial skills in all educational programmes (Accenture, 2001:11).

It is also globally recognised that education plays an important role in increasing entrepreneurial activities of different countries. In America it was reported that entrepreneurship education is gaining a foothold in elementary through high school in at least 30 states. At least eight states have passed legislation requiring such education, and the Federal Department of education has approved the first curriculum (Timmons & Spinelli, 2004:15).

Recognition of the pivotal role of entrepreneurship in development leads us to emphasise the importance of institutions that engender processes of entrepreneurial discovery. It motivates us to enquire into the institutional conditions that are highly conducive to entrepreneurship and to investigate the institutional changes necessary in moving towards a market-oriented economy (Harper, 2002:2). Therefore focus must be on education as it is overly emphasised by most researchers. No country has succeeded without educating its people; education is key to sustaining growth and reducing poverty. The power of education to improve people can be noticed everywhere. Most important education is a basic human right that frees the spirit from the chains of ignorance (Conley & Pattersion, 2000:182).

In order to increase both the extent and the quality of entrepreneurship in South Africa, the primary challenge is to expand the pool of potential entrepreneurs. This is a long – term project. The key policy lever for achieving it is education (Driver et al., 2001:5). There is a wide spread idea that entrepreneurship education would generate more and better entrepreneurs than there have been

in the past and that education would increase the chances of obtaining entrepreneurial success (Alberti, Sciasca & Poli, 2004:2). In South Africa the curriculum is such that General Education and Training (GET) Grade R-9 and Further Education and Training (FET) Grade 10-12 lay the basis for an entrepreneurial society, both in terms of basic skills and entrepreneurial mindsets. Higher Education Institutions can provide valuable additional entrepreneurial capacity, particularly for high potential entrepreneurs (Driver et al., 2001:5). Education by its nature is set up for medium or longer –term outcomes (Brockhaus, Hills, Klandt & Welsch, 2001:58).

It is therefore perceived that the key to raising South Africa's rate of entrepreneurial activity lies in a dramatic improvement in the supply of people with the skills and attitudes needed to become entrepreneurs. This entails two strategies:

- Firstly, there needs to be a major improvement in schooling.
- Secondly, there needs to be a wider application of effective entrepreneurship teaching in schools (Orford et al., 2004,52).

Education and training should be improved so that the supply of people equipped to become entrepreneurs is increased. Improvements to the education and training system emerge as the single biggest priority to create an environment for entrepreneurship (Orford et al., 2004:52). In South Africa entrepreneurship is also seen as a possible solution to the unemployment problem. This is reflected in the emphasis of the government on the establishing of an entrepreneurial culture by, for example, including Entrepreneurship Education in Economic and Management Sciences Learning Area. The vision being that Entrepreneurship Education will become an integral part of the lives of every child, teacher and adult (Gouws, 2002:1) because of its rub off effect. When entrepreneurship hides at school, entrepreneurial habits and attitude will develop (Remes, 2003:2).

Effective youth entrepreneurship education can prepare young people to be responsible, enterprising individuals who become entrepreneurs or

entrepreneurial thinkers hence contribute to economic development and sustainable communities (Ashmore, 2001:1). If learners are to achieve a mindset change from wage-employment to self-employment and starting their independent ventures, they need the necessary exposure, knowledge and skills provided by skilled teachers in order to develop their entrepreneurial orientation (Le Roux, 2003:2)

According to Le Roux (2003:19),

- knowledgeable teachers are needed to bridge the gap between the content on paper and the actual transference of the skills and attitudes to the learners.
- teachers should also collaborate with various institutions and organisations in the business sector when assigning projects to learners and
- to teach and develop an entrepreneurial orientation needs highly motivated, competent and committed teachers.

The problem is that to achieve all the aspirations and intentions of Entrepreneurship Education South Africa needs teachers with individual drive and passion, self-confidence, initiative, and perseverance. Teachers, who see themselves as unable to influence outcomes in their lives are unlikely to be like entrepreneurs who are able to sustain the levels of drive and determination that, the difficult route to entrepreneurial success requires (Driver et al., 2001:43). It is only through thorough training of teachers using effective programmes of Entrepreneurship Education that teachers can be motivated to transfer the love and the passion for entrepreneurship to the learners.

Although the curriculum has raised people‘s hope in including Entrepreneurship in EMS Learning Area, it shows ten years down the line that the education system is still encountering the same problems and challenges in the implementation of the EMS Learning Area. Teachers still lack the capacity to teach the Learning Area with confidence. The majority of teachers was not trained or has received minimal training on this new Learning Area. Without teachers being trained effectively and equipped with the necessary skills and

knowledge to teach EMS with confidence and transfer the zeal to the learners, education will still be labeled as one of the stumbling blocks to the raising of Total Entrepreneurial Activity in South Africa.

For the past eight years the Department of Education was deeply involved in developing implementation strategies namely, designing the curriculum, identifying the gaps, reviewing the policy, strengthening and streamlining the curriculum. Now that the NCS is implemented in all the grades, hopefully the Department of Education will seriously focus on developing strategies, which will ensure effective implementation including the necessary support that the teachers need in the implementation of the Learning Areas.

1.3 Literature

1.3.1 Entrepreneurship Education as outlined by the South African Curriculum

The school and the education system play a critical role in identifying and shaping entrepreneurial traits. Entrepreneurship education integrates a number of areas, in order for the learners to sell something they have to write, which involves the development of literacy, for them to sell and understand their profits and all the terms related to entrepreneurship, they have to do maths at higher levels, and they have to think about advertising and marketing to develop their creative writing skills. The multidisciplinary approach is one that will motivate the learners (Ashmore, 2001:3) The introduction of Outcomes Based Education (OBE) in 1998 in South Africa has brought certain responsibilities and major new roles to be embraced by the teachers as stipulated by the principles of the National Curriculum Statement (NCS). EMS is one of the eight Learning Areas in the school curriculum. The principle of OBE leaves considerable room for creativity and innovation on the part of teachers in interpreting what and how to teach. A level of high skills and knowledge for all, sets and hold high expectations of what South African learners can achieve, thus putting implementers of the curriculum, the teachers at a tremendous pressure to deliver that which is required by the curriculum. An EMS teacher must have

mastery of the four Learning Outcomes of EMS and their Assessment Standards. It is important in this study to give an overview of which content needs to be conveyed by the teacher. The EMS teacher must be knowledgeable about the following:

Table 1.1 Summary of knowledge and skills required in GET

LEARNING OUTCOME 1 How the economy functions Roles, rights and responsibilities of the role players of the economy	**LEARNING OUTCOME 2** Economic growth and development and how it can be sustained
LEARNING OUTCOME 3 Financial literacy-personal and business finances, Accounting, Consumer skills (knowledge about savings and investments, budgeting etc). All functions of a business (administration, marketing, financing, human resource development, purchasing, production. Management and leadership skills (planning, directing, motivating, negotiating, delegating and conflict management.	**LEARNING OUTCOME 4** Entrepreneurial skills-taking initiative, conceptualising a business, Starting a business, financing a business, running a business and understanding responsibilities of entrepreneurship in communities and environments (to act as adviser, counselor, mentor and role model to the learners).

If teachers do not have the necessary knowledge and skills to interpret the Assessment Standards, then they will not implement the Learning Area effectively. It is not enough for them to know only the content of EMS as stipulated in the NCS but they need more information (than the learners) that will enable them to teach the Learning Area with self-assurance and yield the desired end.

There is need to link the four Learning Outcomes of EMS for the holistic development of the learner. Learning Outcome 4 (Entrepreneurial knowledge and skills) cannot be taught in isolation. Entrepreneurs need to know that in satisfying needs and wants they must reflect critically on the impact of resource exploitation on the environment and on people. The aim should be to promote productivity, social justice and environmental sustainability.

The content of EMS Learning Area must be emphasised in each grade showing progression (Assessment Standards increasing in complexity). The EMS Learning Outcomes and Assessment Standards stipulate knowledge, skills, values and attitude that learners should acquire. This on its own means that the teachers should acquire new knowledge and skills and attitude to handle the new curriculum. If the teachers do not have EMS background then it is the responsibility of the government and other parties to equip teachers with the necessary skills and knowledge to teach the Learning Area with authority. Teachers are willing to learn and the majority of them love the Learning Area, the limitation is that they have not as yet received any formal training on the content of EMS. This leads us to the challenges that most teachers are facing in the implementation of EMS.

1.3.2 Challenges faced in the implementation of entrepreneurship education in schools in South Africa Grade R-9

According to Orford et al., (2004:34), preliminary evidence suggests widespread problems across the country in establishing programmes in schools. The study conducted in 39 schools revealed that 50% did not offer any entrepreneurship education. The primary reasons for this appear to be that schools do not have teachers who are able to teach entrepreneurship and that suitable materials are not available to many schools. In most cases these materials are either sponsored by donors or paid for by course participants. A minority of provincial Departments of Education is currently paying for the entrepreneurship teaching materials

Most schools do not implement Economic and Management Sciences as a Learning Area despite the fact that it is policy and is one of the eight Learning Areas that are compulsory in the General Education and Training. Schools still feel that EMS is a nice to have, they think they have the option to implement it or not. They take it to be a good excuse not to have a teacher who is qualified to teach EMS. Other schools force teachers who are not qualified and do not have interest in EMS, to teach the Learning Area without having received any proper training. It becomes a burden to such teachers that nothing good comes out of them. Attitudes or mindsets that learners acquire at school are probably more important than curriculum content, in terms of developing their entrepreneurial content. Schools where teachers are unmotivated, poorly trained and show no initiative are unlikely to produce inspired, entrepreneurial thinkers (Driver et al., 2001:52). There are basically three types of EMS teachers namely:

- teachers who were only exposed to commercial subjects up to matric. Entrepreneurship is a new field that is receiving a lot of attention now.
- teachers who have a qualification in teaching commercial subjects and still need orientation in EMS. Teachers are inclined to teach only their area of specialisation e.g. Accounting, Typing (as a subject) only not EMS as a whole, regardless of what the policy stipulates.
- teachers who were never exposed to any Economic and Management Sciences knowledge in their schooling

Although entrepreneurship now receives attention in the school curriculum, teaching these skills is outside the capabilities of most teachers (Driver et al., 2001:52). Teachers by nature of their training and experience often do not have the expertise to provide their learners with experiences that teach how the economy works. Many teachers do not have business training and have never worked in their own business, or any business other than education. They often do not speak the language of business (Ashmore, 2001:1). Some of the EMS teachers in GET Grade R-9 were never exposed to any commercial subjects in their schooling and they encounter it for the first time when they have to teach EMS. There can be little doubt, however, that education in South Africa is

responsible to some extent for the country's low rates of entrepreneurial activity. In addition, it is clear that failure lies with the schooling system rather than with the tertiary education system (von Broembsen, Wood & Herrington, 2005:39).

Due to lack of training in entrepreneurship education, teachers have a negative mindset, lack confidence, initiative, motivation and creativity in entrepreneurship. This may result in teachers not being present in the classroom for lessons and not being prepared to teach. A lack of commitment by teachers can have a devastating impact on the mindset of learners, quite apart from their skills development (Driver et al., 2001:52). For educators in innovation and entrepreneurship, helping learners unlock their entrepreneurial potential is a critical challenge (Macfarlane & Ottewill, 2001:167).

Due to lack of knowledge of content, the Assessment Standards are difficult for teachers to unpack, especially teachers who lack EMS background. If the Department is serious about EMS it should facilitate the implementation of this Learning Area such that teachers are truly confident to teach it.

Due to lack of training it is a real challenge that teachers are supposed to teach children to become creative, innovative entrepreneurial people when they have been taught to be workers and wait for direction from others (Gouws, 2002:4)?

The reality in terms of implementation is very far from the ideal envisaged in the curriculum. The overall impression gained is that under qualified teachers are struggling to implement the curriculum. This appears to be a particular problem in Grades R-9 where teachers are not adequately trained or supported to implement new Learning Areas like EMS (Orford, 2005:12).

The main aim is to educate young South Africans to become creative and constructive members of communities, and develop entrepreneurial skills and a spirit of enterprise. Eventually the youth of South Africa must become "masters of their own future". Unfortunately very few teachers in primary schools have the necessary know how and skills to run successful entrepreneurial programmes (Communiké, 2005:1).

Due to lack of training, teachers are inclined to teach what they know and are most comfortable with, for example consume most of the 8% of time allocated to EMS teaching only Typing or only Accounting. Learners are not exposed to other aspects of EMS as stipulated in the policy documents. When discussing career options learners will think only about what they are exposed to. This shows that teachers play a vital role in influencing a learner's perception on career choice.

There is no guarantee that the teachers trained in EMS will continue teaching the Learning Area because of the rotational method practiced in schools. Teachers have no control over themselves.

Problems in implementation also emanate from the lack of capacity of regional and district officials in the various provincial departments of education to support the EMS teachers. In certain districts there are no District officials to coordinate EMS Learning Area. In cases like this it is far fetched to think about EMS teachers supported unless if the teachers themselves form clusters for discussion of EMS matters.

Certainly even without questioning the validity of teaching EMS and Technology in schools there are serious capacity problems. To a large extent it appears that emphasis placed on curriculum development has been exaggerated at the expense of focusing on resource disparities and issues of quality and governance in many schools (Orford, 2005:18)

Economic and labour market change, including growth of the knowledge economy, changes in skills requirements and career patterns demand teachers to assume new roles and change their methods of teaching. The growth of lifelong learning and the widening of participation in higher education has led to new demands on learning and teaching and student support (Maclean, Semmens & Farall, 2004:7).

Some teachers are not sincerely committed to learning about entrepreneurship and to search for knowledge about starting a business on behalf of their

students. Teachers want to help their students but they do not want to make great sacrifices of personal time and energy to do it (Gouws, 2002:4).

1.3.3 Curriculum responsiveness to societal interests and needs

Spiral of global changes imposes necessity of change in economic thinking from traditional concept of 'economy of permanence' to 'economy of transience'. Demand for different, new economic knowledge is present but not articulated enough. Traditional business education was mostly adjusted to the needs of previous planned economy system and was by and large inadequate in the new circumstances (Leko-Simic & Oberman, 2004:1).

It is therefore important that Education must be structured to meet the needs of an increasingly technologically oriented economy; to deliver the requisite research, highly trained people, and knowledge to equip a developing society with the capacity to address national needs; and to participate in a rapidly changing competitive global context (Badsha, 2000:117). Beleaguered by the new demands of economic and technological changes, it is expected of the nation's educational institutions to produce a new generation of workers, fully equipped for their role in building the economy. Whether fully justified or not, such high expectations of the Ministry of Education are understandable, and they constitute a challenge to everyone working in education (Federal Ministry of Education, Seychelles, 2000:1). This leads us to the importance of training EMS teachers to meet the demands of the present age. Agreeing on concepts, defining policies, guaranteeing funding will mean little if the human resource issues do not occupy a central place in lifelong learning equations (Ratteree, 2000:1).

1.3.4 Training teachers in Entrepreneurship Education

Changes in teachers' roles and responsibilities depend in the first place on the resources devoted to strong, initial education or training programmes for teachers, confirmed by a lifelong learning for educators in which they are enthusiastic. More flexible organisations, innovative practices and diversified

functions cannot be assumed without system-wide and individual investments of time, money and motivation in continual professional development. These are the responsiblities of educational employers and the government (Ratteree, 2000:1). Investing in people and skills is increasingly becoming a basic requirement for working in both the public and private sectors (Havlicek, Hron & Ticha, 2004:1). Developing effective EMS teaching capacity would require significant resources.

Entrepreneurial training and education acts as a facilitator for entrepreneurial activities with the main focus being to stimulate entrepreneurial activity and performance (Antonites, 2003:31). Training per se is defined as an intentional effort to teach specific abilities, which are knowledge bearing, to complete the project better. Antonites, (2003:31) argues that where there is no training, people lack the skills to undertake their duties. Westhead and Storey (1997) in Gamage, (2004:3) suggested that in general, there are at least two ways through which training activities influence performance. First, they improve skills and abilities relevant to employees' tasks and development and second, they increase employees' satisfaction with their jobs and workplace. Training positively influences the performance of managers and improves productivity Hirsowitz (1993:25) in (Antonites, 2003:31) argues that training creates new opportunities and possibilities as well as a consciousness to attempt and complete certain tasks in a different way. This holds true for the EMS teachers, if they are trained, their performance will improve and they will be motivated to teach the Learning Area with passion.

The objectives of Entrepreneurship Education should inform the type of programmes that can be designed for teacher training as they cover the important aspects that every teacher who is expected to mentor and produce entrepreneurs should be exposed to.

Whatever competencies, knowledge, skills, values and attitude the learner is expected to possess, teachers must be taken through the same process, providing them with more information and resource materials so that training should be linked to the classroom practice. In other words, Entrepreneurship

Education aims at building the so-called entrepreneurial competencies, which are considered as combinations of the different skills, knowledge and attitudes above listed. (Driver et al., 2001:4), Gouws (1997:143) in Burger, O'Neil and Mahadea, (2005:4) stressed that teachers will have to be trained effectively to introduce the Economic Education or entrepreneurship as part of the formal school curriculum.

The following important question of why do teachers have to be trained in entrepreneurship education is crucial. Van den Aardweg and Van den Aardweg (1993:76) in Gouws (2002:3) define education as a "purposeful, conscious intervention by an adult in the life of a non-adult with the specific purpose of bringing the non-adult successfully to adulthood. Education includes, not only the teaching of subject matter but through teaching the imparting of qualities such as leadership, perseverance, patience, morals, values, decision making and so on. Therefore Entrepreneurship Education could be defined as the purposeful intervention by an adult (the teacher) in the life of a learner to impart entrepreneurial qualities and skills to enable the learner to survive in the world of business (Gouws, 2002:3).

Since the majority of EMS teachers lack the capacity to deliver effective entrepreneurship teaching, this means that teacher training and support needs should be a priority of national and provincial departments of education. The three elements that are necessary for delivering effective support to teachers are the following: orientation of teachers that they understand the EMS Learning Area and what is expected of them; further training of existing teaching staff so that they can develop the skills; confidence necessary to be effective in teaching EMS and entrepreneurship alignment of tertiary teacher training so that it develops teachers equipped to deliver EMS and entrepreneurship (Orford, 2005:15).

Although entrepreneurship education can play an important role in the development of an entrepreneurial culture, successful entrepreneurship education will require a unique hands-on approach for which the teachers will need a special training (Gouws,1997:147). Timmons (2000:49) suggests that

desirable circumstances can be active involvement in entrepreneurial activities, an understanding of the dynamic characteristics of the entrepreneurial environment and the introduction of the existing reality aspects to the practice situation.

Training programmes in entrepreneurship education for the teachers should aim at:

- Affording the teachers an opportunity to identify and stimulate entrepreneurial drive, talent and skill in the learners
- Content of EMS as stipulated by the EMS Learning Area statement
- Equipping teachers with the ability to increase learners' awareness of new venture career possibilities and supporting them in the development of awareness about their entrepreneurial interests, capabilities and potential
- Equipping teachers with the ability to inculcate in the learners attitudes, values, psychological mindsets and strategies necessary for taking on the entrepreneurial role.
- Equipping the teachers with understanding of the entrepreneurial process, entrepreneurial skills, factors that support and inhibit creativity, success and failure, financial operations etc (Hisrich & Peters, 2002:20; Alberti, Sciasca & Poli 2004:8).
- Exposing teachers to new methods of teaching as traditional methods stultify rather than develop the requisite attributes and skills to produce entrepreneurs (Kirby, 2004:1).
- Exposing teachers to teaching methods that involve learners in problem solving in real-world situations, encourage learners to formulate decisions on data, which are immediate, incomplete, "dubious" and, as appropriate, personally generated (to stimulate effectiveness and the ability to cope with uncertainty), provide learners with role models who are involved in both the learning and assessment processes (to demonstrate role orientation, ability and motivation) (Kirby, 2004:15).

- Exposing teachers towards the increased literature on Entrepreneurship Education for example publication of special issues of journals, annual workshops on entrepreneurship and academic journals dedicated solely to the study of this phenomenon (Meibom, 2003:1).
- Equipping teachers with the information that student learning is shaped more by mentoring, coaching, work-based learning, action learning and inter-professional teamwork (Macfarlane & Ottewill, 2001:191; Meibom, 2003:5).
- Equipping teachers with information that the utilisation of role-play allows the experience of real life situations in a protected or risk-free locate as supported by Eilington (1996) in Pihie et al., 2004:2.
- Suggesting several strategies that practitioners can use to promote higher – order thinking in depth understanding and high quality achievement – behaviour and skills associated with entrepreneurship. Betina (1999) in (Pihie & Hamid, 2004:3)

Alma (1998) in Pihie and Hamid (2004:8) concluded that effective teaching is highly dependent upon the nature of the educational outcomes and goal that the teaching is aiming to foster. Games and simulations are a significant form of experiential learning method and offer learners the opportunity to test both their theoretical and their applied knowledge and see the consequences of the decisions they take without having to be responsible for their actions as they would do in the real world Tasey (2002) as quoted by Pihie et al., (2004:8); Pammer (2000:5). Effective schooling should provide crucial skills in verbal and written communication and in Numeracy (Orford et al., 2004,52).

Educators must promote EMS in terms of basic skills (core areas), life skills, information technology skills, entrepreneurial skills, life long learning needed by all learners regardless of their career goals. Relevancy of the Learning Area, requirement, association, career preparation, interest, importance, and image also contribute to the learning environment (Brantley & Davis 2003:50). If a good foundation can be laid in Entrepreneurship Education in General

Education and Training, then there is confidence that the learners will also choose also Business Studies as well as other subjects such as Science, Technology, Hospitality Studies, Arts, Accounting etc. Locke and Schöne (2004:68) advocate the idea of spilling over entrepreneurship education across the curriculum. This idea was apparent when Curriculum 2005 was first introduced. Entrepreneurship was one of the five Phase Organisers, which made every Learning Area to consider integrating entrepreneurship in their teaching and learning. When the curriculum was reviewed, streamlined and strengthened, this idea was thrown out. It is vital that all Learning Areas should emphasise entrepreneurship.

Jack and Anderson (1998) suggested that teachers should be exposed to the two faces of entrepreneurship education, that it involves both art and science part (De Faoite, Henry, Johnston & van der Sijde, 2003:4;Cope & Watts 2000:4. :Gibb 1993 in Alberti, Sciasca and Poli, (2004:13) suggests that entrepreneurship education should cope in new ways with the real world.

Learning is seen as a lifelong continuous process initiated by teachers/ workplace but directed by learners, which can happen any time and anywhere (De Beer, Brandt & Jacobs, 2004:5). The goal of every teacher is to remain current in knowledge and skill, having a task of providing the most realistic, beneficial experience possible with available resources while continuing to lobby for improvements (Brantley & Davis, 2003:56). These are some of the teaching methods that are required to develop a cadre of entrepreneurs who will promote economic growth and create employment to meet the rising economic expectations of all South Africans (Gouws, 2002:5).

The Consortium of Entrepreneurship Education under the leadership of Cathy Ashmore in the State of Ohio, USA, poses a good example to be followed in South Africa for the training and supporting of EMS teachers. The Consortium is giving ongoing support to teachers of Entrepreneurship Education through an annual one-week conference for teachers, has 85 member organisations with their own networks to do the training, whilst providing the ideas in the form of National Content Standards thus ensuring ongoing support to teachers.

1.3.5 Entrepreneurship Education Training that is already going on in South Africa

Education must be higher on the agenda of everyone, governments, donor agencies, NGOs, trade unions, the private sector, and foundations. Achieving quality education for all can no longer be the responsibility of the Ministries of Education alone (Conley & Pattersion, 2000:183).

The training of teachers is more crucial than ever. . Teacher training should, from the start run simultaneously with classroom teaching so that theory can always be tested against teacher classroom realities in a dynamic interaction between teacher and pupils (Gouws, 2002:5)

Table 1.2 Selected entrepreneurship-training programmes in South Africa

Programme	Provider	Material
Business Box	Entrepreneurs on the move	Non-curricula
Business Ventures	South African Institute of Entrepreneurship	EMS curricula
Enterprise Dynamics Programme	Junior Achievement South Africa	EMS curricula
Hands on Market	Foundation for Enterprise and Business Development	EMS curricula
Mindset	Mindset	Non-curricula
YES (Youth Enterprise Society)	Education with Enterprise Trust	Non-curricula

Source Friedrich et al 2004 as in Orford et al, 2004:52

Business Ventures programme developed by South African Institute for Entrepreneurship (SAIE) was evaluated by the UCT Centre for Innovation and Entrepreneurship which is engaged in ongoing research initiative to investigate

the effectiveness of entrepreneurship education in South Africa. It was found that SAIE was one of the two leading South African providers of entrepreneurship teaching materials for use in schools, the other being the Foundation for Enterprise and Business Development (Friedrich et al., (2004), UWC in Orford et al., (2004,52). SAIE teaching and learning methodologies have received recognition both locally and internationally. The Business venture has been used in over 2900 schools in South Africa and in other four countries. The impact of the programme was noticed in the schools where it is administered (Orford et al., 2004,52).

Omsobomvu is committing itself to making a good contribution in the implementation of EMS. The aim is to increase the entrepreneurial activity of the country by targeting learners in Grade 8-9 in GET and 10-12 in FET at school who will acquire an entrepreneurial knowledge, skills and attitude and become entrepreneurs who will contribute to the development of the economy. Their aim is to stimulate entrepreneurship education and equipping high school learners with understanding of economic principles and business skills while they develop positive attitudes towards business establishment. They targeted four teachers at a school, two EMS and two mathematics. The teachers are trained and as an incentive are registered with UNISA for a short course in Entrepreneurship Education. Omsobomvu is presently working in three provinces -Gauteng, Mpumalanga (Moretele District) and Limpopo (Kone Kwena) with 10 schools in each province (30 schools in total) (EMS Learning Area Committee Meeting: 2005).

All these endeavours are appreciated and have a great impact in the training of teachers and on the learners, but it is still on a very small scale taking into consideration +/- 27 000 schools in South Africa. There are still many more endeavours concerning the training of EMS teachers that are not mentioned or known. All training programmes developed should not compete with the existing curriculum. Instead should seek to develop capacity to deliver the curriculum (Orford, 2005:21).

Developing effective ways for teachers to develop their skills and knowledge about EMS while furthering their careers is important. Teachers already in the system will need programmes such as the Advanced Certificate of Education to be developed to allow EMS teachers to further their knowledge and their skills (Orford, 2005:21).

It is necessary to look at how teachers evaluate themselves and their perception on the EMS knowledge and skills they have. What might influence their self-evaluation?

1.4 Teacher perceptions

Perception in Psychology indicates that as soon as stimuli are received by the senses; the mind immediately begins working on them. Therefore the sensory images that people are conscious of are not exactly the same as what we saw, heard, or felt; they are what our senses perceived. Perception of stimuli is not as straightforward as reception of stimuli; rather it is influenced by our mental state, past experience, knowledge, motivations and many other factors (Slavin, 1991:132). There are many factors that might influence self-evaluation of perceived knowledge and skills of EMS teachers. Sears, Peplau and Freedman (1988:12) postulate that there are two principles that are central to perception, that is people group or categorise the things they perceive and again that they focus attention particularly on the most prominent stimuli. These cognitive principles are important for people's interpretations of the intangible aspects such as intentions, motives, attitudes, or personality traits. This allows social thinkers to arrive at meaningful interpretations of how people feel, what they want, what kinds of people they are, and so forth.

In psychological literature, intentions have proven the best predictors of any planned behaviour. Intentions in general depend on perceptions. Attitudes influence behaviour by their impact on intentions. Intentions and attitudes depend on the situation and the person (Krueger, Reilly & Carsrud, 2000:412). The effective implementation of EMS mainly depends on teacher perceptions, attitude and intentions to teach this Learning Area. Teaching is also influenced

by teacher beliefs systems which are structured sets of views, conceptions, and values held by a teacher with respect to the elements composing his or her teaching practices (Mapolelo, 2003:2).

According to the Theory of planned behaviour, attitude toward the act refers to the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question. People automatically acquire an attitude toward behaviour. In this way people, form favourable attitudes toward behaviours believed to have desirable consequences and negative attitudes toward behaviour associated with undesirable consequences Ajzen (1991:191) as quoted by Veciana, Aponte and Urbano (2005:168). Teachers who understand why EMS must be taught can adopt a positive attitude and interest and try their best even in the midst of the multitude of challenges whereas others may adopt a negative attitude and do things contrary to the policy or what the curriculum requires. A negative attitude of a teacher may cause him/her to be less interested in teaching, or stick to old ways of teaching EMS or even refuse to try to teach it.

Control beliefs deal with the presence or absence of requisite resources and opportunities. Emphasis is on the availability of resources (Veciana et al., 2005: 168). A teacher's belief system might influence her or him that certain resources are needed before proper learning and teaching can take place. A teacher may demand certain use of technology and feel helpless without such.

People present and describe their situations in ways that are favourable even though they are not realistic; this is what is called positivity bias (Sears, Peplau & Freedman, 1988:59). People in general have a tendency of reporting only on positive things that may make them feel good even if it is not true or at times provide responses to impress the other party or the researcher.

1.5 Conclusion

The contents of the programme for training teachers in the content of EMS and the teaching methods required to produce entrepreneurs, teachers need to be

equipped with the rationale, mindset, tools, skills and knowledge to infuse the spirit of entrepreneurship into classrooms and to expand entrepreneurial career options.

To prosper teachers need to cultivate the attributes of flexibility and adaptability. It is the responsibility of all stakeholders not only the Department of Education to enable the teachers of EMS to acquire new skills and knowledge and expose them to new methods of applying existing skills and knowledge to cope with the demands of this age for example changes in working practices and expectations of learners and other stakeholders. As a result, priority will need to be given to professional and personal development and the application of some new approaches. All stakeholders including teachers, for their attitude to embrace the new curriculum and its demands and their willingness to accept new roles as teachers, count a lot in their personal and professional development.

In the national effort to improve the status of the teachers of EMS in South Africa, effective use should be made of existing leading service providers in the area of Entrepreneurship Education. Partnerships between schools and stakeholders, departments of education and other interested parties can bring better results. It is promising that, with appropriate training and support, teachers can develop appropriate knowledge and skills and confidence needed to effectively implement the Learning Area. Improvement of economic growth and creation of jobs and wealth for South Africans will be achieved only when all role-players are engaged in this battle.

CHAPTER 2
PROBLEM STATEMENT, HYPOTHESIS AND RESEARCH METHODOLOGY

2. PROBLEM STATEMENT, HYPOTHESIS AND RESEARCH METHODOLOGY

2.1 Introduction

One of South Africa's greatest limitations to economic development is definitely the shortage of entrepreneurs (Gouws, 2002:42). The development of an entrepreneurial culture is a protracted process involving numerous role players. Education is an important contributor to the development of an entrepreneurial culture (Burger, O'Neil & Mahadea, 2005:2). It is also postulated by von Broembsen et al., (2005:38) that the schooling system in South Africa does not prepare students adequately to be able to sustain an opportunity–motivated new business venture.

2.2 Problem statement

The problem to be addressed is whether intervention through the training of teachers in the Economic and Management Sciences Learning Area, is perceived to equip teachers with the necessary knowledge and skills to prepare learners to have an entrepreneurial inclination. Orford (2005:15) has already established that currently teachers working in the General Education and Training Band (Grades R-9) lack the capacity to deliver effective entrepreneurship teaching. The author has also suggested that teacher training and support need to be priorities of national and provincial departments of education.

2.3. Hypothesis statements

Hypotheses are statements about what our theoretical propositions lead us to expect to find. They enable theories to be tested by predicting patterns of

observations that should occur. Hypotheses therefore predict patterns of association in observed data as a means for testing causal theories (Buckingham & Saunders, 2004:14).

To direct the thinking process, the following hypotheses were developed:

Ho1: EMS teachers do not need training and support to implement the Learning Area with confidence.

Ha1: EMS teachers need training and support to implement the Learning Area with confidence.

Sub-hypotheses

Ho2: EMS teachers do not have mastery of the EMS Learning Outcomes

Ha2: EMS teachers have mastery of EMS Learning Outcomes

Ho3: EMS teachers do not have mastery of Learning Outcome 1: Economic cycle.

Ha3: EMS teachers have mastery of Learning Outcome 1: Economic cycle.

Ho4: EMS teachers do not have mastery of Learning Outcome 2: Sustainable development and growth

Ha4: EMS teachers have mastery of Learning Outcome 2:Sustainable development and growth

Ho5: EMS teachers do not have mastery of Learning Outcome 3: Managerial, consumer and financial knowledge and skills

Ha5: EMS teachers have mastery of Learning Outcome 3:Managerial, consumer and financial skills

Ho6: EMS teachers do not have mastery of Learning Outcome 4: Entrepreneurial knowledge and skills

Ha6: EMS teachers have mastery of Learning Outcome 4:

Entrepreneurial knowledge and skills

2.4. Research methodology, data collection and analysis

2.4.1. Research methodology

The term “methods” is normally reserved for the technology of research, the actual tools by which data are gathered and analysed, while “methodology” refers to the logic or philosophy underlying particular methods (Buckingham & Saunders, 2004:15).

This chapter gives detailed information of how the study was conducted, the methods that were used in gathering data for the empirical part of this study and how data was analysed to show self evaluation of perceived knowledge and skills of teachers of Economic and Management Sciences Learning Area in South Africa.

The universe and the sample frame are discussed, as well as the sample size. The description of the method of data collection is also given. The discussion also covers the formulation of the questionnaire in its attempt to gain answers to reach the objectives of the study. Lastly, the chapter outlines data processing, analysis and the evaluation of results.

The first part of the study shows that the starting point of the collection of data, which is based on secondary sources and is descriptive in nature, is used to describe the ex-post facto situation regarding the intervention that is needed to assist the EMS teachers to effectively implement the Learning Area with confidence.

The second part of the study shows the primary research, which was conducted, using the survey method through a self-administered questionnaire (see Appendix 1). The target group was EMS teachers in the General Education and Training Band (Grades R-9). The data collection included the

technique of each teacher being asked to respond to the same set of questions in a pre-determined order.

The first part of the primary research determined whether the EMS teachers have mastery of the four Learning Outcomes of the EMS Learning Area Statement Grade R-9 and whether they need training and support to ensure its effective implementation. The following steps were followed:

- The EMS Learning Area Statement was scrutinised and some of the Assessment Standards from each Learning Outcome per Grade were selected to determine the knowledge and skills the teachers should possess or able to teach.
- The Assessment Standards were classified according to the knowledge and skills required from the learners. The teachers were then asked whether they have the necessary knowledge and skills required.
- A four point scale was used for teasing out the necessary data from the EMS teachers.
- The aim was to measure teachers' mastery of the four EMS Learning Outcomes and to find out whether additional training and support of the EMS teachers will equip them with the necessary skills and knowledge to implement the Learning Area with confidence.

  The four EMS Learning Outcomes were used to unpack the hypothesis.

2.4.2 Data and sample decision

2.4.2.1. Data required

- **Population to be researched**

The research focuses on teachers who are currently teaching in the Economic and Management Sciences Learning Area in the General Education and

Training (GET) Band Grades R-9. The GET Band covers three phases of schooling, namely the Foundation Phase, the Intermediate Phase and the Senior Phase

- **The research sample and sample size**

From a statistical point of view, the best sample is one, which is truly random because this enables researchers to accurately quantify and control uncertainty. A random sample is one in which every member of the population has an equal chance of being selected (Lancaster, 2005: 149). EMS teachers from all South African schools were targeted. Teachers from three provinces participated in the research survey. The 138 teachers who completed the self–administered questionnaire were either given the questionnaire at school or during the National Curriculum Statement teacher training workshops. The study does not purport to be representative of all EMS teachers in South Africa. What has been realised is that EMS teachers throughout the country encounter similar challenges in the implementation of the new curriculum.

2.4.2.2. Method of data collection

The study used a combination of both qualitative and quantitative methods to collect and ultimately analyse data. Both methods have their strengths and weaknesses. Qualitative methods allow for more probing and in depth exploration of a particular view. Quantitative methods lend themselves much more to standardisation and application across many sites (Mouton, Wildschut & Boshoff, 2000:106).

Questionnaire design

The literature review informed the development of the questionnaire. According to Lancaster (2005:82), secondary data is used in exploratory research that helps shape any subsequent primary data collection processes. The study used a self-administered questionnaire for data (See Annexure 1).

Structured questions were developed to cover all four Learning Outcomes of the EMS Learning Area. The nature of the questions attempted to quantify and qualify perceptions, responses to, and realities of the necessary skills and knowledge that the EMS teachers have or would like to acquire for the effective implementation of EMS Learning Area.

- **Rating Scale**

The Likert Scale is the most frequently used variation of the summated rating scale. Summated scales consist of statements that express either a favourable or unfavourable attitude toward the object of interest. The respondent is asked to agree or to disagree with each statement. Each response is given a numerical score to reflect its degree of attitudinal favourableness and the scores may be aggregated to measure the respondent ‘s attitude (Cooper & Schindler, 2001: 234). A four point scale in which, four is strongly agree, three is agree, two is disagree and one is strongly disagree was used.

- **Piloting the questionnaire**

Pilot testing is meant to reveal errors in the design and improper control of extraneous or environmental conditions. Pre-testing the instruments permits refinement before the final test. This is the researcher ‘s best opportunity to revise the scripts, look for control problems and laboratory conditions and scan the environment for factors that might confound results (Cooper & Schindler, 2001: 399).

The purpose of pilot testing is to identify and eliminate problems and refine the questionnaire before the actual study is conducted. The questionnaires were given to three groups of eighteen EMS teachers each in three different provinces to complete and were refined thereafter.

A number of closed questions, with a choice of one response, had a qualitative element linked to them through open type of questions. This enabled the

researcher to cross tabulate the quantitative findings with a qualitative reason or explanation particularly for some of the inconsistencies or contradictions.

- **Data processing, basic analysis and evaluation of results**

After collection, the completed questionnaires were taken to the Department of Statistics at the University of Pretoria. The raw data gathered from the questionnaires was captured onto a Microsoft Excel spreadsheet for analysis.

Lastly, the information was imported into the statistical SAS software programme where the final analysis and cross- tabulations were made (SAS/STAT user's Guide; + Cary, NC; SAS Institute Inc).

- **Coding**

After data collection, the answers needed to be prepared so that they could be computer-analysed (Buckingham & Saunders, 2004: 288). Coding means assigning numbers or other symbols to answers so that responses can be tallied and grouped into a limited number of classes or categories (Cooper & Schindler, 2001:759). All responses were coded. Respondents' answers to open-ended questions were noted down and also coded.

- **Data cleaning**

Once data is entered there is need for it to be 'cleaned' of coding and/or data errors. Data cleaning is the process of identifying and rectifying errors in a data set (Buckingham & Saunders, 2004: 288). Cleaning may include making decisions about which data to discard if, for example, it is incomplete, unreadable or irrelevant (Fink, 2003:111). To achieve this, checks and balances with relevant SAS software package were run.

2.4.3. Data analysis

The collected data is interpreted for the purpose of drawing conclusions that reflect on the interests, ideas, and theories that initiated the inquiry (Mouton et al., 2000:46). Data analysis means editing and reducing accumulated data to a manageable size, developing summaries, looking for patterns and applying statistical techniques (Cooper & Schindler, 2001:760).

2.4.3.1 Analysis of qualitative data

Analysis of the responses from questionnaires revealed categories that were specific to individual respondents, as well as themes that were shared by two or more respondents. These categories were then coded to facilitate data sorting and the subsequent analysis and interpretation. The major categories that emerged during the analysis of qualitative data were the following:

- Explanation of the concept “entrepreneurship”
- Explanation of the concept ”productivity”
- What should be done to make implementation of EMS effective?
- The type of training that will appeal more to EMS teachers.
- The type of skills teachers need for the effective implementation of EMS.
- The type of knowledge teachers need for the effective implementation of EMS.
- Limitations that the teachers experience in the implementation of EMS.

Information that is valuable and very helpful emerged in the analysis of qualitative data. It became evident that it is sometimes essential to combine several types of analysis to analyse and make sense of data. The use of multiple, but independent measures is referred to as triangulation. Using several different methodologies and techniques of analysis therefore can give much more accurate and insightful findings than when only one method is used, as some weaknesses are offset (Lancaster, 2005:172). It is increasingly appreciated that such qualitative data is far from being “inferior” to its quantitative counterpart and is often the most powerful and useful data (Lancaster, 2005:164). Qualitative methods are used to evaluate the reliability

of any measure. Depending on the purpose of the measure, qualitative evidence of reliability may be sufficient (Sullivan, Rassel & Berner, 2003:248). Interest has been in developing better and more powerful techniques of analysing qualitative data in order to improve its reliability and validity (Lancaster, 2005:165).

2.4.3.2 Analysis of quantitative data

The study used structured response or closed response specified alternatives provided to collect quantitative data. The data from the variables was analysed statistically.

- **Table**

The study is descriptive and involves no comparison between groups and will be presented in the form of histograms, reports of means and standard deviations (Partington, 2002:101). A standard set of tables and summaries were developed.

- **Validity and reliability**

Validity is achieved by using research instruments that measure what they are intended to measure (Buckingham & Saunders, 2004:72).

Reliability refers to the extent to which a data collection or measurement technique yields the same results on different occasions (Lancaster, 2005:78). A measure is reliable to the degree that it supplies consistent results (Cooper & Schindler, 2001:215). Reliability has to do with the accuracy and precision of a measurement procedure (Cooper & Schindler, 2001:210).

The trade off between validity and reliability

The choice between closed and open-ended questions again poses the dilemma that enhancing the reliability of the measures can diminish their

validity, and vice versa. The more the respondents are allowed to answer questions in their own words, the more insight into what is hoped to be measured, will be derived. Validity tends to be more effectively achieved with open-ended questions .The more the respondents are forced to address their replies to a pre-set list of possible answers, however, the more it can be ensured that each item will be measured in exactly the same way every time it is used. Reliability, therefore, tends to be enhanced when using pre-coded questions (Buckingham & Saunders, 2004:76).

2.4.4 Item Analysis

Measurement scales are tested with a sample of respondents (Cooper & Schindler, 2001:229). In item analysis, after administering the test, a total score is calculated for each scale. Individual items (a scale or part of a scale) are then analysed to determine which best discriminate between persons or objects with high total scores and low total scores (Cooper & Schindler, 2001:231).

As there is limited time for testing and scoring, it is desirable that the testing time be used effectively by making as reliable and as valid a measurement as is feasible with as small a number of items as possible. This is achieved by choosing items that contribute maximally to reliability and validity. The choice must be based on an analysis of the likelihood of each item's increasing the reliability and validity. Every item is tested in terms of its contribution to reliability (Magnusson, 1967:197).

The items measured the following constructs:

- the respondents' ability to teach the EMS Learning Outcomes 1-4
- mastery of Learning Outcome 1: Economic Cycle
- mastery of Learning Outcome 2: Sustainable growth and development
- mastery of Learning Outcome 3 : Managerial , consumer and financial knowledge and skills
- mastery of Learning Outcome 4 : entrepreneurial knowledge and skills
- the perceived special needs of the respondents for training.

2.4.5 Analysis of variance (Anova).

A statistical test for testing the null hypothesis that the means of several populations are equal; the test statistic is the F ratio; used when k independent samples tests are needed (Cooper & Schindler, 2001:757).
Anova is a statistical procedure to determine whether or not there are any differences among two or more groups of respondents on one or more factors (Fink, 2003:133).

Analysis of variance was done to determine whether gender, age, highest level of education and level of exposure to EMS knowledge or commercial subjects have an influence on the scores of the scales.

The advantage of using ANOVA methods to multiple studies, two-group studies is that it is more efficient and one can gain more information with fewer observations.

ANOVA relies on the F distribution to test the hypothesis that the two variances are equal. The variation is divided into two components: the variation between each subject and the subjects' group mean (e.g. the variation between each participant in the experiment and the experimental group's mean) and the variation between each group mean and the mean (the mean of all groups). The sum of squares, mean squares, and degrees of freedom are all mathematical terms associated with ANOVA (Fink, 2003:96).

2.5 Objectives and contribution of the research

2.5.1 Objectives

The primary objective of this study is to determine whether EMS teachers need additional training and support to give them the necessary knowledge and skills to interpret the National Curriculum Statement Grade R-9.

- State the challenges faced in the implementation of entrepreneurship education in South Africa

2.5.2 Contribution of the research

The objective is to determine the necessary skills and knowledge that the EMS teachers need to be developed in order to teach the Learning Area with passion.

The results will be used to:

- Inform the type of teacher development the South African EMS teachers need.
- Inform all stakeholders, including departments of education, NGOs and other parties, who would like to train and support EMS teachers so that they can teach EMS with confidence
- Inform Institutions of Higher Learning on the type of programmes and short courses they may design for EMS teachers.
- Provide information on the type of Teacher Support Materials needed to equip and support EMS teachers in order to facilitate the teaching of the Learning Area.
- Highlight to all stakeholders the challenges that EMS teachers are facing and appeal to them to take part in addressing them.

2.6 Conclusion

The chapter gave an outline of the research methodology, data collection and data analysis. It provided the description of the problem statement, hypothesis statements, methods used for data collection, the measuring instrument, the research sample, analysis of the qualitative and quantitative data, as well as the objectives and the contribution of the research.

The results of the empirical investigation will be discussed in Chapter 4.

CHAPTER 3

FINDINGS

3. FINDINGS

3.1 Introduction

The statistical analysis was done on 138 questionnaires with all respondents in the sample base being EMS teachers in General Education and Training (Grades R-9).

The results of the empirical data are also given in tabular format. The demographic data presented include gender, race, age, highest level of education, highest level of exposure to Economic and Management Sciences knowledge or commercial subjects, commercial subjects exposed to in own studies and reason for teaching EMS and the grades taught.

The frequencies do not always add up to 138 because some of the respondents did not respond to all the questions.

3.2 Descriptive data: demographics

3.2.1 Gender

Table 3.1 Gender distribution of the sample

GENDER	**FREQUENCY (n)**	**PERCENTAGE (%)**
Male	60	44.78
Female	74	55.22
Total	**134**	**100.00**
Frequency missing 4		

There are slightly more female (55%) than male respondents (45%).

3.2.2 Race

Table 3.2 Race distribution of the sample

RACE	FREQUENCY (n)	PERCENTAGE (%)
Black	107	82.31
White	18	13.85
Asian	3	2.31
Coloured	2	1.54
Total	**130**	**100.00**
Frequency missing: 8		

There is an uneven distribution with more Black teachers (one hundred and seven or 82,31%) than White, Asian and Coloured teachers combined.

3.2.3 Age

Table 3.3 Age distribution of the sample.

AGE	FREQUENCY (n)	PERCENTAGE (%)
20-25	2	1.49
26-35	38	28.36
36-45	58	43.28
46-55	33	24.63
55 +	3	2.24
Total	**134**	**100.00**
Frequency missing: 4		

The age group 36-45 is the biggest component of the sample.

3.2.4 Highest level of education

Table 3.4 Highest level of education (attained) distribution of the sample

HIGHEST LEVEL OF EDUCATION	FREQUENCY (n)	PERCENTAGE (%)
Certificate	9	6.77
Diploma	80	60.15
Degree	36	27.07
Honours	7	5.26
Masters	1	0.75
Total	**133**	**100.00**
Frequency missing: 5		

Of the respondents eighty nine (66%) have diplomas, certificate holders or even less qualified. Graduates comprise 36 respondents (27%).

3.2.5 Highest level of exposure to Economic and Management Sciences knowledge or commercial subjects

Table 3.5 Highest level of exposure to Economic and Management Sciences knowledge or commercial subjects distribution of sample

Highest level of exposure of EMS knowledge or commercial subjects	**Frequency (n)**	**Percentage (%)**
High School	39	30.71
Technicon	9	7.09
University	35	27.56
Technical	2	1.57
No knowledge acquired	33	25.98
Reading out of interest	9	7.09
Total	**127**	**100.00**
Frequency missing 11		

Only forty-four (35%) of the sample have post school exposure to Economic and Management Sciences.

3.2.6 EMS/Commercial Subjects exposed to in own studies

Table 3.6 Distribution of the subjects, the respondents were exposed to whilst still studying

Subject	Frequency
Accounting	55
Business Economics	76
Economics	55
Mercantile Law	9
Typing	22
Commercial Maths	12
Entrepreneurship	17
Computer Science	14
Total	**260**

Some of the respondents had been exposed to more than one Commercial Subject.

3.2.7 Reason for teaching EMS

Table 3.7 Distribution of reasons for teaching EMS

Reason for teaching EMS	Frequency (n)	Percentage (%)
I am qualified	41	31.30
I am interested	74	56.49
I have to (forced to as there is no one qualified to teach EMS in my school)	16	12.21
Total	**131**	**100.00**
Frequency missing 7		

The reasons for teaching EMS are given as qualified, interested or because no one in the school is qualified to teach EMS.

3.2.8 Grades taught

Table 3.8 Grades taught: sample distribution

GRADE	FREQUENCY (n)
Grade R-3	1
Grade 4-6	44
Grade 7-9	98
Total	**143**

Some teachers teach in more than one Phase.

3.3 Item Analysis

Item analysis was done to measure the following constructs: respondents' ability to teach, mastery of EMS Learning Outcomes 1-4 and perceived special needs for training.

3.3.1 Ability to teach EMS

The following tables explain associated items within the sample. EMS respondents' ability to teach EMS, Learning Outcomes 1-4 and the perceived training needs of the respondents

Table 3.9 Respondents' ability to teach EMS

Ability to teach EMS	Item mean	Item variance	Item scale correlation
Confidence in teaching EMS	3.222	0.484	0.60
Teaching EMS is interesting	3.548	0.277	0.63
Teaching EMS is challenging	3.105	0.681	0.39
Teaching EMS is difficult	3.142	0.599	0.54
Teaching EMS is outside capabilities of most teachers	2.814	0.710	0.38
Intention to study EMS further	3.383	0.673	0.52
GET learners have to be exposed to EMS	3.394	0.390	0.56

These are the questions asked on how respondents perceived their ability to teach EMS.

3.3.2 Mastery of Learning Outcome 1: Economic Cycle

Table 3.10 Mastery of Learning Outcome 1: Economic Cycle

Mastery of Economic Cycle Ability to explain	Item mean	Item variance	Item scale correlation
The economic cycle	3.252	0.411	0.70
The roles, rights and responsibilities of role players in the economy	3.244	0.437	0.81
How trade (imports and exports) address the economic problem	3.157	0.475	0.81
The working of the South African economy	3.023	0.503	0.81
How the national budget functions	2.917	0.647	0.82

Table 3.10 shows how teachers perceive their own knowledge of Learning Outcome 1: Economic cycle.

3.3.3. Mastery of Learning Outcome 2: Sustainable growth and development.

Table 3.11 Mastery of Learning Outcome 2: Sustainable growth and Development.

Mastery of Sustainable growth and Development Ability to explain	Item mean	Item variance	Item scale correlation
Knows what economic growth entails	3.104	0.422	0.84
Impact of economic growth and development on the development of the community and the society	3.037	0.406	0.85
The value of savings and investments in growing the economy	3.095	0.363	0.79
The value of productivity on economic prosperity, growth and global competition	3.029	0.481363	0.82
Motivate learners to explore personal steps to improve own standard of living	3.265	0.371	0.71

Table 3.11 shows how teachers perceive their own knowledge of Learning Outcome 2: Sustainable growth and development

3.3.4 Mastery of LO 3: Managerial, consumer and financial knowledge and skills

Table 3.12 Mastery of LO 3: Managerial, consumer and financial knowledge and skills

Mastery of Managerial, consumer and financial knowledge and skills **Ability to**	**Item mean**	**Item variance**	**Item scale correlation**
Do basic financial calculations	3.230	0.547	0.85
Explain how personal budgets work	3.309	0.419	0.82
Assist learners in the actual production from raw materials to final products	3.234	0.500	0.74
Familiar with the financial concepts used in business	3.109	0.565	0.85
How to complete the income statement and the balance sheet	2.756	0.955	0.79

Table 3.12 shows how teachers perceive their own knowledge of Learning Outcome 3:Managerial, consumer and financial knowledge and skills.

3.3.5 Mastery of LO 4: Entrepreneurial knowledge and skills

Table 3.13 Mastery of LO 4 Entrepreneurial knowledge and skills

Entrepreneurial knowledge and skills	Item mean	Item variance	Item scale correlation
Enough time allocated to LO 4	2.876	0.547	0.60
Schools expose learners to EMS as required by LO4	2.650	0.680	0.60
Can see the link between Entrepreneurship Education and economic growth and development	3.022	0.620	0.61
Have adequate knowledge on what entrepreneurship entails	3.127	0.484	0.74
Can identify business opportunities	3.164	0.376	0.74
Can perform SWOT Analysis	3.023	0.734	0.69
Can draw up a business plan	2.955	0.714	0.77
Can assist learners in running a real business	3.075	0.547	0.78
Assist learners in participating in joint ventures between school and the community/parents	2.872	0.487	0.65
Assist learners in keeping financial records of their business	3.038	0.608	0.66
Can motivate learners to become entrepreneurs	3.343	0.375	0.73
Has the necessary knowledge, and attitude to teach entrepreneurship	3.008	0.504	0.76

Has the necessary entrepreneurial knowledge and skills to act as an adviser to the learners	2.970	0.495	0.72
Has the necessary business skills to act as a mentor to the learners	2.826	0.598	0.69
Entrepreneurship in schools encourages experiential learning that allows learners to engage in practical business activities	3.157	0.535	0.66
Entrepreneurship Education will generate more and better entrepreneurs than there have been in the past	3.410	0.376	0.46
Education will increase the chances of obtaining entrepreneurial success	3.233	0.464	0.47
There is adequate time to cover all EMS LOs	2.474	0.819	0.45

Table 3.13 shows how teachers perceive their own knowledge of Learning Outcome 4: Entrepreneurial knowledge and skills.

3.3.6 Training

Table 3.14 Training needs of EMS teachers to ensure effective teaching of EMS Learning Area

To ensure effective teaching of EMS teachers need help	Item mean	Item variance	Item scale correlation
In the form of short courses offered by Higher Education Institutions with accreditation	3.551	0.468	0.79
In the form of teacher workshops	3.529	0.440	0.85
In the form of support from District officials	3.478	0.514	0.82
Need more EMS Teacher Support Materials	3.640	0.333	0.72
Do not need any help	3.609	0.554	0.52
Need more training in Business Skills	3.581	0.332	0.72

Table 3.14 shows how respondents perceive their training needs. Respondents feel they need more training in EMS.

3.4.1 Item analysis for constructs

Table 3.15 Item analysis for constructs

Scale	Ability to teach EMS	Econ Cycle	Sustain Developm	Man, Fin & Con	Entrep Knowl & skills	Training Needs
Number of items	7	5	5	5	18	6
Mean	3.231	3.115	3.103	3.127	3.004	3.567
Variance	0.140	0.308	0.261	0.385	0.237	0.235
Std Dev	0.375	0.555	0.510	0.621	0.487	0.485
Minimum	2.200	1.000	1.200	1.000	1.556	2.000
Alpha	0.520	0.848	0.858	0.862	0.922	0.826

Table 3.15 shows that the lowest Alpha is an indication that all scales are reliable. Alpha scales and item scale correlations are satisfactory. Items are highly correlated to each other.

3.4.2 Scale Intercorrelations for constructs

Table 3.16 Scale intercorrelations for constructs

	1	2	3	4	5	6
1						
2	0.414					
3	0.374	0.741				
4	0.295	0.512	0.584			
5	0.441	0.527	0.635	0.657		
6	0.337	0.072	0.036	-0.055	0.065	1.000

Table 3.16 shows that all the item-score correlations above 0.3 are reliable and can be used.

3.4.3 In your opinion entrepreneurship means (give an explanation)

Table 3.17: Respondents reported the following:

	Explanation	Frequency	Percentage
1	Take a risk, start, own a business, run a business, be your own boss, innovation and initiation of a business	79	43.65
2	Make a profit	22	12.15
3	See a gap, come with a business opportunity,	26	14.36
4	To satisfy the needs and wants with products and services	26	14.36
5	Knowing about business	7	3.87
6	Working in the business of others	2	1.10
7	Innovation and acquire resources	4	4.41
8	Involved in the economic world	2	1.10
9	Organizes factors of production	6	3.31
10	Small business	2	1.10
11	Learner trade	1	.55
12	Management and leadership	2	1.10
13	Involved in entrepreneurial activities	2	1.10

Table 3.17 shows that when respondents were asked to give an explanation of entrepreneurship it became clear that few of them could give an adequate definition of Entrepreneurship.

3.4.4 In your opinion productivity means (give an explanation)

Table 3:18 Respondents reported the following:

	Explanation	Frequency	Percentage
1	To produce goods and services	50	40.32
2	The average of goods produced by one seller	4	3.23
3	Using inputs such as money, labour to produce more goods and services	13	10.48
4	Creation of utility in a product to make it more useful	1	0.81
5	Producing good results in education	3	2.42
6	Measures how efficiently a business uses its resources to create an output	3	2.42
7	To be able to produce more /quality goods and services with little effectively	17	13.71
8	Being able to produce what is expected of you at the correct time	12	9.68
9	To work satisfactorily so as to reach your goals	5	4.03
10	Anything can be useful to the people	4	3.23
11	To improve your business and the community	2	1.61
12	The country has more resources and capital to export and import	2	1.61
13	Relationship between goods and services produced in the economy of the country to indicate proficiency	2	1.61
14	Buying and selling goods in a profitable manner	1	0.81

Table 3.18 shows that for the explanation of productivity, it became clear that few respondents could give an adequate definition of productivity. Most

respondents, forty in number (32%) think productivity is producing goods and services.

3.4.5 In your opinion, what do you think should be done to make the implementation of EMS effective in South African schools (to make the teach EMS with confidence and passion)?

Table 3.19 : Respondents reported the following:

	Explanation	Frequency	Percentage
1	Educators should be trained formally in Higher Education Institutions for three years or enrol for short courses	34	18.68
2	Supply resources to schools e.g. detailed LTSM, including charts, videos, cash registers etc	36	19.78
3	Adequate workshops ensuring longer training, practical in nature, equipping teachers with sufficient knowledge and skills, conducted by experts or knowledgeable people, business people give presentations, in service training, skills development courses, sufficient proper guidance, training on content is crucial	80	43.96
4	Using qualified and informed teachers to teach EMS	3	1.65
5	Supply of resource materials like bulletins, newspapers, business publications etc; Government put aside resources to show teachers and learners that EMS is a practical Learning Area	4	2.20

6	Teachers be offered certificates and incentives to boost their morale	2	1.10
7	Contact with the business world	1	0.55
8	Schools work together with organisations that promote entrepreneurship	3	1.65
9	Teachers concentrate on one phase i.e. GET or FET only not both.	1	0.55
10	Teachers must not teach overcrowded classes	3	1.65
11	Support by the department of education and district office is crucial	9	4.95
12	Schools should allow teachers who were trained in EMS to continue teaching EMS and not rotate them every year	4	2.20
13	Use market days and EMS classes to increase learner participation in entrepreneurship activities	1	0.55
14	More time should be allocated to the EMS Learning Area	1	0.55

Table 3.19 shows that according to the respondents, the main foci, in effectively implementing EMS should be training through the conducting of workshops, professional development through Higher Education Institutions of learning, and the supply of appropriate resources.

3.4.6 In your opinion, what type of training in EMS will appeal more to teachers?

Table 3.20 : Respondents reported the following:

	Explanation	Frequency	Percentage
1	Training should be for more days during holidays for teachers to acquire more knowledge. Training should be continuous, in-service training, cluster meetings	40	32
2	Teacher development programmes designed by Higher Education Institutions are crucial	33	26.40
3	Workshops in Accounting	12	9.60
4	Attend workshops, during weekends, monthly, quarterly	7	5.60
5	Workshops on content of EMS covering all LOs, Workshops which do not take place over weekends or during holidays as teachers need their time; workshops that are practical and will generate passion in the respondents for the Learning Area	13	10.40
6	Use qualified teachers to teach EMS	1	0.80
7	Supply adequate resources, information and materials	11	8.80
8	Workshop on Entrepreneurship Education/Business skills	2	1.60
9	Support from District officials is crucial and should be in such a way that officials visit schools and literally teach to demonstrate that to the respondents	4	3.20

10	Workshops run by experts e.g. entrepreneurship education run by lecturers who know the field or entrepreneurs themselves	1	0.80
11	Workshop on National Curriculum Statement	1	0.80

Table 3.20 shows that workshops stood out as the type of training that appeals most to respondents.

3.4.7 In your opinion, what type of skills do EMS teachers require for the effective implementation of the EMS Learning Area?

Table 3.21 Respondents reported the following:

	Explanation	Frequency	Percentage
1	Skills associated with Accounting, Economics, Business Economics and Mathematics	66	39.52
2	Critical thinking skills and analytical skills	1	0.60
3	Listening skills	2	1.20
4	Interpersonal skills	1	0.60
5	Communication skills	6	3.59
6	Teaching skills required for Accounting and the ability to analyse budgets, including the country ‘s national budget	30	17.96
7	Instil interest to teach the Learning Area	1	0.60
8	Entrepreneurship skills/ Business skills	42	25.15
9	Motivational skills	4	2.40
10	Developmental skills	3	1.80
11	Computer skills	2	1.20
12	Management skills	2	1.20
13	Time management skills	3	1.80
14	Creative and cognitive skills	2	1.20
15	Technological skills	1	0.60
16	Reading skills	1	0.60

Table 3.21 shows that the main skills required to teach EMS according to the respondents are mainly those associated with Accounting, Economics, Business Economics and Mathematics, as well as entrepreneurial/business skills.

3.4.8 In your opinion, what type of knowledge do EMS teachers need for the effective implementation of the EMS Learning Area?

Table 3.22 Respondents reported the following:

	Explanation	Frequency	Percentage
1	Knowledge of EMS, commercial subjects, Economics, Business Economics, Accounting, practical alignment with NCS	62	42.18
2	Commercial core concepts and content	1	0.68
3	Function of the economy	12	8.16
4	More information from resources like newspapers; TV, radio	3	2.04
5	Accounting/financial knowledge	21	14.29
6	Entrepreneurship/ business knowledge	41	27.89
7	EMS terminology	7	4.76

Table 3.22 shows that the knowledge required by the respondents emerged to be knowledge of EMS as required by the NCS , commercial subjects which are, Economics, Business Economics, Accounting and their practical alignment with NCS' as well as an Entrepreneurship /business knowledge , they all add up to87.86%

3.4.9 What limitations do you experience in the implementation of the EMS Learning Area (name five and prioritise from most limiting)?

Table 3. 23 : Respondents reported the following:

	Explanation	Frequency	Percentage
1	Lack of resources - no internet, no library, no computers	44	13.62
2	Time allocated to EMS too limited	32	9.91
3	Insufficient LTSM; Textbooks are not good; LTSM do not cover all the EMS LOs; textbooks do not give EMS content but only activities; Learner Support Materials not enough for learners; one school has only one EMS textbook borrowed from a neighbouring school	43	13.31
4	Lack of motivation from DoE, District officials lack knowledge of EMS.	50	15.48
5	Lack of Accounting knowledge	28	8.67
6	Poor environments - far from economic activity, poor communities cannot afford excursions	22	6.81
7	Inadequate, insufficient workshops, lack of proper training or no training	22	6.81
8	Lack of computer skills	1	0.31
9	Lack of knowledge of EMS Learning Area, lack of qualified teachers	13	4.02
10	Overcrowding	22	6,81
11	Teach combined classes	2	0.62
12	Teaching different phases, different grades from Grade 4-9	3	0.93

13	Lack of prior knowledge, EMS background, practical experience, entrepreneurial knowledge, EMS terminology	18	5.57
14	Lack of support by parents; lack of support by school (rotating teachers every year) and Lack of support from local business (e.g. can not give learners information needed)	12	3.72
15	Learners display lack of interest	1	0.31
16	Lack of support from District Officials	6	1.86
17	No link between education and economic growth	2	0.62
18	Communication barriers - from district to school	1	0.31
19	Research that needs learners to go out with questionnaires	1	0.31

Table 3.23 shows that the factors that emerged to be the most daunting barriers are lack of knowledge of EMS on the part of the respondents and District officials (33.74%), lack of resources (27.51%), followed by limited time allocated to EMS (9.91%), lack of proper training (6.81%), overcrowding (6.81%) and poor environment (6.81%).

3.5 Analysis of variance (Anova) for EMS perception of own ability

Analysis of variance was done to determine whether gender, age, level of education, level of exposure to EMS knowledge or commercial subjects have an influence on the scores of the scales.

Table 3.24 : Results of the Anova for EMS perception of own ability

		N	Mean	Std Dev	F	Pr > F
Gender	Male	56	3.171	0.350		
	Female	71	3.279	0.396	3.97	0.049
Age	25-35	36	3.256	0.396		
	36-45	57	3.221	0.361		
	46	34	3.226	0.401	0.41	0.666
Highest level of education	1-2	83	3.225	0.379		
	3-6	44	3.245	0.382	0.20	0.652
Highest level of exposure to EMS knowledge	1	39	3.236	0.362		
	2,4	11	3.116	0.284		
	3	35	3.208	0.470		
	5-6	42	3.277	0.332	1.14	0.336

Table 3.24 shows that no significant difference was observed for EMS perception of own ability to teach the Learning Area in as far as gender, age, highest level of education and highest level of exposure to EMS knowledge.

3.5.1 Learning Outcome 1: The Economic Cycle

Table 3.25: Results of the Anova for EMS Learning Outcome 1: The Economic Cycle

		N	Mean	Std Dev	F	Pr > F
Gender	Male	56	3.074	0.530		
	Female	71	3.162	0.580	1.25	0.265
Age	25-35	36	3.326	0.482		
	36-45	57	3.012	0.628		
	46	34	3.094	0.454	2.50	0.086
Highest level of education	Certificate, diploma	83	3.049	0.565		
	Degree, Honours, Masters, Doctorate	44	3.262	0.521	4.25	0.042*
Highest level of exposure to EMS knowledge	High school,	39	3.173	0.520		
	Technicon, Technical	11	3.200	0.497		
	University,	35	3.285	0.644		
	No knowledge acquired, Reading out of interest	42	2.922	0.478	2.01	0.117

Table 3.25 shows that a significant difference was observed between perceived knowledge of respondents for EMS Learning Outcome 1 and the highest levels of education

3.5.2 Learning Outcome 2: Sustainable growth and development

Table 3.26 Results of the Anova for EMS Learning Outcome 2: Sustainable growth and development

		N	Mean	Std Dev	F	Pr > F
Gender	Male	56	3.067	0.527		
	Female	71	3.145	0.504	0.11	0.74
Age	25-35	36	3.261	0.424		
	36-45	57	3.12	0.389		
	46	34	3.006	0.525	2.26	0.108
Highest level of education	Certificate, diploma	83	3.309	0.432		
	Degree, Honours, Masters, Doctorate	44	3.051	0.572	10.15	0.002**
Highest level of exposure to EMS knowledge	High school,	39	3.390	0.500		
	Technicon, Technical	11	3.257	0.544		
	University,	35	2.971	0.406		
	No knowledge acquired, Reading out of interest	42	2.922	0.478	2.95	0.036

Table 3.26 shows that a highly significant difference was observed between levels of education and perceived knowledge of respondents for EMS Learning Outcome 2.

3.5.3 Learning Outcome 3: Managerial, consumer and financial knowledge and skills

Table 3.27 : Results of the Anova for EMS Learning Outcome 3: Managerial, consumer and financial knowledge and skills

		N	Mean	Std Dev	F	Pr > F
Gender	Male	56	3.048	0.607		
	Female	71	3.221	0.583	2.20	0.145
Age	25-35	36	3.448	0.551		
	36-45	57	2.939	0.614		
	46	34	3.1212	0.474	6.05	0.003 **
Highest level of education	Certificate, diploma	83	3.107	0.648		
	Degree, Honours, Masters, Doctorate	44	3.212	0.491	0.13	0.719
Highest level of exposure to EMS knowledge	High school,	39	3.164	0.617		
	Technicon, Technical	11	3.340	0.542		
	University,	35	3.404	0.518		
	No knowledge acquired, Reading out of interest	42	2.863	0.550	3.37	0.021

Table 3.27 shows that a highly significant difference was observed between the age group 25-35 and perceived knowledge of the EMS Learning Outcome 3: Managerial, consumer and financial knowledge and skills.

3.5.5. Learning Outcome 4: Entrepreneurial knowledge and skills

Table 3.28: Results of the Anova for EMS Learning Outcome 4: Entrepreneurial knowledge and skills

		N	Mean	Std Dev	F	Pr > F
Gender	Male	56	2.985	0.461	0.54	0.466
	Female	71	3.063	0.473		
Age	25-35	36	3.176	0.463		
	36-45	57	2.940	0.511		
	46	34	3.011	0.357	1.72	0.183
Highest level of education	Certificate, diploma	83	2.982	0.483		
	Degree, Honours, Masters, Doctorate	44	3.117	0.429	1.40	0.239
Highest level of exposure to EMS knowledge	High school,	39	2.998	0.479		
	Technicon, Technical	11	3.126	0.379		
	University,	35	3.173	0.433		
	No knowledge acquired, Reading out of interest	42	2.910	0.483	0.88	0.453

Table 3.28 shows that no significant differences were observed for EMS Learning Outcome 4.

3.5.6. Training

Table 3.29: The results of the ANOVA for training

		N	Mean	Std Dev	F	Pr > F
Gender	Male	56	3.391	0.464		
	Female	71	3.405	0.419	0.49	0.485
Age	25-35	36	3.414	0.451		
	36-45	57	3.381	0.426		
	46	34	3.411	0.458	0.55	0.579
Highest level of education	Certificate, diploma	83	3.433	0.440		
	Degree, Honours, Masters, Doctorate	44	3.334	0.433	1.16	0.284
Highest level of exposure to EMS knowledge	High school,	39	3.462	0.343		
	Technicon, Technical	11	3.149	0.503		
	University,	35	3.289	0.503		
	No knowledge acquired, Reading out of interest	42	3.498	0.369	2.03	0.114

No significant differences were observed for training.

3.6 Conclusion

This chapter outlined the main findings of the primary data component of the study. The findings were based on self-evaluation of perceived knowledge and skills of EMS teachers.

The demographic data reported findings on respondents' gender, race, age, and highest level of education, highest exposure to EMS, EMS knowledge exposed in own studies, reasons for teaching EMS and the Grades taught.

The results of the item analysis showed the scores of the following items, which were measured: respondents' ability to teach EMS; mastery of EMS Learning Outcome 1-4; and perceived training needs. The high item mean scores indicated that respondents perceived themselves to be knowledgeable in EMS.

The results from ANOVA revealed the difference for gender, age, highest level of education, level of exposure to EMS or commercial subjects have on the ability of the respondents to teach EMS, their mastery of Learning Outcome 1-4, and the training they perceive they need. A significant difference was observed between levels of education. Higher levels of education resulted in a higher probability of perceived knowledge of EMS Learning Outcomes 1-3.

In Chapter 4, the findings will be discussed, final conclusions made, recommendations provided and areas for further research outlined.

CHAPTER 4

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

4. DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

4.1 Discussion

In order to explore self-evaluation of perceived knowledge and skills the EMS teachers have, information was gathered using a questionnaire. In the preceding section, detailed analysis of qualitative data obtained from the questionnaire was presented. In this section, the results of the analysis are discussed and interpreted.

4.1.3 Analysis of the teachers' ability to teach EMS

The high item mean scores in Table 3.9 on the ability to teach EMS seem to contradict the fact that ninety (69%) of the respondents do not have a qualification in EMS as previously discussed. What is interesting is that, despite this fact, they feel they have the confidence and the interest to teach EMS and that it is not challenging and difficult. They admit that teaching EMS is outside the capabilities of most teachers. Teachers' intention to study further in this Learning Area will equip them with more knowledge and skills. A large number, which is 88% of the respondents, indicated that they would like to study further in EMS. Teachers recognise the significance of EMS and see the value of exposing the GET learners to the Learning Area.

4.1.4 Analysis of mastery of LO 1- 4 in Tables 3.9, 3.10, 3.11 and 3.12.

According to the results, respondents rated themselves very high in their ability to teach the four Learning Outcomes of EMS, when correlated to the ninety (69%) of teachers who are not qualified as previously discussed. There is a positivity bias eminence, which is a tendency to present and describe their

situations in ways that are favourable even though they are not realistic (Sears, Peplau & Freedman, 1988:59). Teachers presented and described their knowledge and skills in ways that are favourable even though it is contrary to the apparent reality. From secondary data it was confirmed that the teachers need the necessary knowledge and skills to implement EMS with confidence. There are factors that may contribute to the respondents' bias, which may be linked to the interest they have in teaching the Learning Area. The fact that teachers perceive themselves as knowledgeable in EMS (positivity bias), may show that they have good intentions in teaching the LA or, more especially, that a large percentage said they teach the Learning Area out of interest. Although the respondents know that they do not have the required knowledge and skills to teach the Learning Area, they rated themselves as highly knowledgeable, showing that they were rating their interest to teach EMS, not their ability. According to the theory of planned behaviour, attitude toward the act refers to the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question (Veciana, Aponte & Urbano, 2005:165).

Another factor that might have influenced the teachers to rate themselves highly might be the propensity to act as defined by Shapero, as the personal disposition to act on one's decisions, thus reflecting volitional aspects of intentions ("I will do it") Seligman (1990) as quoted by Krueger, Reilly and Casrud (2000:419).

In all the four EMS Learning Outcomes the following aspects scored low amongst teachers/schools:

- ability to explain how the national budget functions.
- how to complete an income statement and balance sheet.
- knowledge and skills on drawing up a business plan.
- how to assist learners in participating in joint ventures between the school and the community/ parents.
- the necessary entrepreneurial knowledge and skills to act as an adviser to the learners.
- inadequate time allocated to cover all EMS Learning Outcomes
- the necessary business skills to act as mentor to the learners

- allocation of sufficient time to LO 4.

4.1.5 Analysis of the EMS teachers' training needs

The results displayed in Table 3.13 show that teachers really need intervention to implement the Learning Area effectively. The high item mean scores give empirical evidence that training in various forms is needed. When various items under training were taken in isolation it was found that the following prevailed: 93% of the respondents preferred training in the form of short courses with Higher Education Institutions with accreditation. 95% of the respondents agreed that EMS teachers need intervention in the form of workshops conducted for teachers. 91% agreed that support from District officials is needed. An overwhelming 96% indicated that help in the form of EMS teacher support materials is needed. No less than 97% of the respondents need more training in Business skills and 95% agreed that there should be intervention to assist teachers.

It was previously discussed that teachers perceive that they have the necessary knowledge and skills to teach EMS LOs. The analysis in Table 3.14 shows a perception discrepancy. Although teachers perceive that they have ability and the mastery of EMS Learning Outcomes, they also strongly maintain that they need training showing a contradictory perception. It would be expected of the teachers to indicate that they do not need training since they are knowledgeable.

4.1.6 Analysis of an explanation of entrepreneurship construct

The analysis in Table 3.16 shows that when respondents were asked to give an explanation of entrepreneurship, a few of them could mention some aspects included in the explanation of entrepreneurship but could not give a complete explanation. Nieman and Bennett (2002:58), as quoted in Nieman, Hough and Niewenhuizen (2003:9), postulate that there is no consensus on the definition of entrepreneurship. Taking key concepts from a number of definitions, one can identify some important aspects of entrepreneurship and characteristics of an

entrepreneur, which can be identifying an opportunity, innovation and creativity, getting resources, creating and growing a venture, taking risks being rewarded with profit and managing a business. Some respondents just gave one or two aspect(s) e.g. own a business, run a business, know about business, see a gap and come with a business opportunity etc. Teachers have an idea of what entrepreneurship is, but would need more knowledge on entrepreneurship, perhaps through training by entrepreneurship experts. The explanations most respondents gave are evidence enough that most of the people who are supposed to produce entrepreneurs still grapple with the basic concepts of entrepreneurship.

4.1.7 Analysis of an explanation of productivity construct.

From Table 3.17, showing the results of respondents being asked to give an explanation of productivity, it is clear that most respondents could not give a proper definition of productivity. Many respondents, (forty of them or 32%), gave only an explanation of production mistaking productivity for production. Respondents said that productivity means producing goods and services.

Productivity entails converting resources (inputs) into products and services (outputs) efficiently, effectively and with optimum utilisation of human capital and physical resources for the benefit of society, the economy and the environment (National Productivity Institute definition).

Explanations given are an indication that respondents still need to be equipped with more knowledge and skills in EMS.

4.1.8 Analysis of respondents' opinion on what should be done to make the implementation of EMS effective in South African schools.

According to the results in Table 3.18, the majority of teachers reported three main things that are important for the effective implementation of EMS, namely training in the form of workshops and courses with Higher Education Institutions as well as the supply of resources to schools.

Teachers recommended adequate, ongoing workshops, ensuring longer training, practical, equipping teachers with sufficient knowledge and skills, conducted by knowledgeable people (experts), providing sufficient proper guidance to the teachers, including presentations by business people. (It is preferred that follow-ups after workshops be done). In-service training and automatic registration of teachers for skills development were also mentioned.

Teachers reported that there is a need for teacher development programmes by institutions of higher learning. Teachers would enrol with HEIs to further their studies for 2-3 years, or take short courses.

4.1.9 Analysis of respondents opinions on the type of training that will appeal more to EMS teachers

In Table 3.19 the results show that workshops stood out to be the type of training that appeals most to respondents. These workshops, facilitated by subject experts, should be on EMS, Accounting, or Entrepreneurship content. They should also be continuous over a sufficient number of days to equip teachers with the required knowledge and skills to implement the EMS Learning Area.

4.1.10 Analysis of respondents opinions on the type of skills EMS teachers need for the effective implementation of EMS Learning Area

In Table 3.20, the results show that the skills needed according to the respondents' are mainly in Accounting, Economics, Business Economics, Mathematics to teach EMS, and Entrepreneurship/business skills**.**
When the teachers were asked about their knowledge of the EMS LOs, the respondents perceived themselves as knowledgeable whereas they indicate a need for a high level of continuous training that is in line with the literature review.

4.1.11 Analysis of respondents opinions on the type of knowledge EMS teachers need for the effective implementation of EMS Learning Area

According to the results in Table 3.21, respondents reported that they need further knowledge of EMS in respect of how the economy functions, EMS terminology, financial and entrepreneurship/business knowledge, Economics, Business Economics, Accounting and the practical alignment with NCS.

4.1.12 Analysis of respondents opinions on the type of limitations they experience in the implementation of EMS Learning Area

In Table 3.22 the results show that the most limiting factors in the implementation of EMS Learning Area can be classified under the following: inadequate resources, lack of knowledge, lack of support, inadequate training, and problems around learning and teaching. These categories are given in more detail below:

Inadequate supply of resources

- Certain schools do not have libraries, access to Internet facilities and computers.
- Many schools are in poor environments – far from mainstream economic activity. Farm schools have limited access to high profile entrepreneurs
- Limited business opportunities in poor environments
- Practical business projects, which an input of money, are difficult to perform due to poverty. Poor communities cannot afford excursions.
- Insufficient Learning and Teaching Support Materials (LTSM)- Textbooks are inadequate or not useful, do not cover all the EMS Learning Outcomes, do not give enough EMS content to help the teacher but only activities, insufficient in quantity for all the learners or at times irrelevant to the LOs addressed

- Time allocated to EMS Learning Area is too limited and most projects cannot be accomplished. There is inadequate time to cover all Learning Outcomes

Lack of knowledge of the EMS Learning Area

- Lack of prior knowledge, EMS background, practical experience, entrepreneurial knowledge, EMS terminology
- Lack of sufficient, practical information on business related matters e.g. statistics, percentages, drawing budgets etc
- Lack of reference materials – no libraries
- Lack of computer skills
- Lack of Accounting knowledge
- Lack of sufficient knowledge concerning the assessment of learners
- Lack of sufficient knowledge concerning the clustering of Assessment Standards
- Lack of knowledge of the new curriculum. What roles do LOs/SOs play in a lesson?
- Challenges in drawing up Learning Programmes, Work Schedules and Lesson Plans
- Lack of ability in doing mathematical calculations
- Lack of knowledge (on content e.g. productivity, entrepreneurship calculations of profit, EMS terminology and context)
- Lack of practical lessons or demonstrations
- Lack of Accounting and Economics knowledge on the part of both teachers and learners
- Insufficient information on Accounting and other EMS matters
- Accounting section should be removed from EMS
- Lack of financial knowledge

Lack of support

- Lack of support by parents.
- Lack of support by school (rotating teachers every year).

- Lack of guidance from HOD in school.
- Lack of cooperation by local business people who do not give learners (enough) information when they do research.
- Lack of support from District Officials.
- Lack of motivation from the Department of Education.
- Lack of knowledge of EMS by District officials and, as a result, teachers do not get the necessary support.

Inadequate training or no training

- Inadequate, insufficient workshops, lack of proper training or no training poses a lot of problems.
- No training in EMS content (more training is needed on entrepreneurship and accounting).
- Workshops are not enough. Inadequate training time is a problem.
- Teachers cannot coach learners as they too lack knowledge.
- Teachers are teaching EMS without having received any training in the Learning Area.
- Learners receive less information from the teacher due to lack of training.

Problems emanating from learning and teaching EMS

- Certain learners are not interested in EMS and cannot be motivated by teachers as they also lack the knowledge and skills to teach EMS. Learners' unwillingness to learn and lack of discipline becomes a problem.
- Learners stay with pensioners and do not do their homework.
- It takes time to explain concepts to learners.
- Overcrowded classrooms pose enormous problems.
- Teaching in more than one Learning Area, more than one Grade and in more than one phase, or even teaching combined classes is strenuous. Teachers suggest that there should be phase teachers who work in GET or FET, not both.
- Teachers cannot coach learners as they lack knowledge.

- Teachers are overloaded with work in other Learning Areas and do not have enough time to dedicate to EMS.
- EMS is allocated to teachers who have not studied it and have no interest in the learning area.

4.1.13 Analysis of the results of ANOVA for EMS Learning Outcome 1 and Learning Outcome 2

In Table 3.24, higher levels of education resulted in higher perceived knowledge of EMS Learning Outcome 1: Economic Cycle ($p<0.005$)
In Table 3.25, higher levels of education related to higher perceived knowledge of respondents in EMS Learning Outcome 2($p<0.01$): Sustainable growth and development. The higher the level of education, the more they perceive themselves knowledgeable in LO 1 and LO 2. One of the factors that contribute to this might be that previously Economics was one of the commercial subjects taught and Learning Outcomes 1 and 2 are linked to Economics.

4.1.14 Analysis of the results of ANOVA for EMS Learning Outcome 4

In the variance analysis in Table 3.25, no significant differences were observed as regards, gender, age, highest level of education, and highest level of exposure to EMS knowledge pertaining to Learning Outcome 4. The reason might be that in the past, teacher training did not include entrepreneurship.

4.2 Conclusion

From the analysis it is clear that the EMS teachers need the necessary knowledge and skills to implement the Learning Area effectively. There are expectations that, through training interventions, teachers might be more equipped to teach the Learning Area with confidence and passion.

The first hypothesis, Ho1, that EMS teachers do not need training and support to implement the Learning Area with confidence is rejected and the Ha1 is

accepted. EMS is a new Learning Area and teaching it is outside the capabilities of most teachers. The majority of teacher respondents 90 in number, (69%), are not qualified to teach EMS. Realising the need to acquire more knowledge and skills in EMS, the teachers themselves have indicated that they have some intentions to study further in EMS. Teachers have also recommended training in its various forms e.g. in the form of teacher development programmes offered by Higher Education Institutions, in the form of workshops and support from district officials in Provincial Departments of Education. It is envisaged that with training, teachers' skills and abilities will be improved and their performance will be better to benefit learners.

The second hypothesis, Ho2, that EMS teachers do not have mastery of EMS Learning Outcomes is accepted. Although teachers have rated themselves highly indicating that they have mastery of the EMS Learning Outcomes, it is concluded that this is not so. It is clear that in the qualitative data more realities were unearthed and it is evidence enough that they do not have mastery of the EMS LOs and still need intervention in the form of training and support to equip them with the necessary knowledge and skills.

The third hypothesis, Ho3, that EMS teachers do not have mastery of Learning Outcome 1:Economic Cycle, is accepted. In responding to the question on the type of skills and knowledge the teachers need to effectively implement EMS. The majority of teacher respondents indicated that they need Economics. When responding to the limitations they encounter in implementing EMS, the majority of teachers mentioned that they lack knowledge in EMS content, as well as Economics. The Learning Outcome 1 of EMS deals with how the economy functions and it is thus fundamentally Economics.

The fourth hypothesis, Ho4, that EMS teachers do not have mastery of Learning Outcome 2: Sustainable development and growth is accepted. Findings revealed that teachers still lack the necessary skills and knowledge to implement EMS effectively. It was found that few of the teachers could give the proper explanation of what productivity is or their answers revealed only a partial understanding thereof. It was clear that some of the teachers have some

idea of what productivity is, while some thought it was synonymous to production. This probably indicates that teachers still need intervention to master EMS terminology and content. The emphasis on training is evidence enough to show that teachers have the hope that through training they will acquire more knowledge and skills.

The fifth hypothesis, Ho5, that EMS teachers do not have mastery of Learning Outcome 3: Managerial, consumer and financial knowledge and skills is accepted. Findings revealed that teachers still need to acquire the necessary skills and knowledge in this Learning Outcome. A significant portion of teachers, 57in number or 48%, indicated that they need skills in Accounting, when asked the type of skills they need. When they were responding to the type of knowledge EMS teachers need, (61 teachers or 51 %) of the respondents indicated that they need financial knowledge and Accounting. Teachers indicated that lack of knowledge in Accounting is one of the limitations they experience in implementing EMS. They also stated that the type of training that will appeal more to EMS teachers would be on Accounting. This provides empirical evidence that teachers generally, do not have mastery of EMS LO 3.

The sixth hypothesis, Ho6, that EMS teachers do not have mastery of Learning Outcome 4: Entrepreneurial knowledge and skills is accepted,. Entrepreneurship was historically not one of the commercial subjects taught in schools. Entrepreneurship has only recently received attention and many teachers have not been exposed to it, either in their studies or through working experience. Explanations of Entrepreneurship given by teachers did not cover all the aspects of entrepreneurship but were attempts to display or demonstrate an understanding of what entrepreneurship is or what it might mean. It is evident that teachers do not have mastery of LO 4.

Findings revealed that EMS teachers need skills and knowledge in entrepreneurial/business skills and also in Business Economics.

4.3 Shortcomings of the study

- The study was conducted on a sample of only 138 EMS teachers from three provinces; therefore universal generalisations cannot be made. The study does not purport to be representative of all EMS teachers but it is prevalent that EMS teachers throughout the country are experiencing similar challenges.
- Valuable information was unearthed in qualitative data. Teachers were sincere and spelled out what proved useful. The instrument lacked the ability to elicit the type of information desired through quantitative data on the aspects that were aimed at testing teachers' ability to teach EMS and mastery of EMS LOs 1-4.
- Teachers' responses were inflated as they overrated themselves.

4.4 Recommendations

Arising out of the study, the following recommendations are made:

4.4.1 There is need to train EMS teachers for the effective implementation of the Learning Area (Knowledge precedes implementation).

Implication

There is need to embark on an intensive upgrading of EMS teachers to equip them with the necessary skills and knowledge to implement the Learning Area effectively. The respondents suggested that the Department of Education (DoE) could consider enabling teachers to learn continuously by promoting life long learning in this Learning Area. The DoE can provide adequate time and resources for the intensive training of teachers in the form of workshops and ongoing guidance and support. Some even suggested workshops conducted once a month or at least quarterly. Cluster meetings (a number of neighbouring schools coming together to form a cluster to enable the teachers of the same

Learning Area to meet and empower one another, at times through the help of a Learning Area District Coordinator) were also suggested.

The Department of Education should ensure a motivated, skilled, knowledgeable and qualified teacher workforce. Involvement of Higher Education Institutions in equipping teachers through short courses in EMS or an ACE was recommended. Another option was to encourage teachers to enrol for a full qualification and also to register teachers with Skills Development Agencies.

4.4.2 There is need for the Department of Education to develop partnerships with other stakeholders

Implication

There is a need for the Department of Education to partner with other interested stakeholders like NGOs, other departments, entrepreneurship experts, Higher Education Institutions and entrepreneurs or the private sector etc, to facilitate the implementation of this Learning Area such that teachers are truly confident to teach it. Businesses should consider ploughing back into the society by adopting a school or learner entrepreneurs to provide mentoring programmes and also introducing learnerships at school level. A youth learnership programme can be defined as a multi-year programme that combines school and work based learning in a specific occupation (Kroon, de Klerk & Dippenaar, 2003:319). The promotion of entrepreneurship should not be left as the sole responsibility of the education department only. All South Africans need to play their part in making the country more entrepreneurial. Entrepreneurship needs to become an integral and accepted feature of economic and personal life so that increasing numbers of South Africans recognise their own entrepreneurial potential. Effective and targeted action will result in South Africa reaping growing economic benefits from its entrepreneurs (Foxtrot, Wood, Kew, Herrington & Segal 2002:7). Niewenhuizen and Kroon (2002:157) as quoted by Burger, O'Neill and Mahadea (2005:89) postulate that to inculcate the

entrepreneurial culture in the society, the economic and political institutions should support the educational system.

Part of the national effort to improve education needs to include support to teachers responsible for delivering entrepreneurship education. Effective use should be made of existing leading service providers in the area of entrepreneurship education (Orford et al., 2004:52). People with expertise should train the teachers on Entrepreneurship Education. In cases where District officials were expected to train teachers, it was observed that some of them were not confident enough with the content although they have a qualification in commercial subjects. Entrepreneurship is a new field of interest. Both the teachers and the District Officials should be trained to ensure on going support by the officials.

4.4.3 There is need to realise that entrepreneurship education is compulsory only in the General Education and Training Band

Implication

There is a need for all the stakeholders to realise that the GET Band is the only N.Q.F. band at the moment where entrepreneurship education is compulsory. The policy requires that all learners from Grades R to 9 be exposed to all the eight Learning Areas, including EMS. In the FET Band, entrepreneurship is found in the subject Business Studies, which is not a guarantee that all learners will be exposed to it or follow this field. It is therefore very important for all stakeholders to give all they have in the GET Band, in order to inculcate a love for entrepreneurship in the learners, laying a solid foundation and making it attractive to the learners by training the teachers. Attitudes that teachers pass on to the learners have a life long effect

4.4.4 There is need to develop EMS Teacher Support Material

Implication

There is a need to develop a handbook on EMS content in which all the Assessment Standards will be unpacked for the teachers in the Foundation, Intermediate and Senior Phases. The aim is to help particularly the teachers who do not have an EMS background, to enable them to be confident in implementing the Learning Area. The development of this handbook should involve all the interested stakeholders who would like to make a contribution relevant to the EMS Learning Area e.g. different departments, financial institutions involved in economic and management matters.

4.4.5 There is need for the emergence of organisations that will be involved in entrepreneurship education in order to improve teachers' performance.

Implication

There is need to offer teachers ongoing support through various methods. It can be through the organising of workshops, annual conferences and seminars, publishing field–tested materials, offering technical assistance and information dissemination to teachers, development of Learner and Teacher Support Materials, a helpdesk, development of programmes for professional development of EMS teachers, training and certification of teachers and developing new methodologies that could enhance the teaching learning process etc.

4.4.6 Effort to upgrade teachers' qualifications

Implication

Over the next five years every school should endeavour to have at least on its staff two teachers that are accredited with the skills to teach economic and financial literacy. In secondary schools, these teachers are most likely to be

maths, accounting or business economics teachers. It is important that programmes such as the Advanced Certificate of Education be developed to allow EMS teachers to further their knowledge and skills.

4.5 The type of training that EMS teachers need.

The findings indicated that, teachers would like to acquire skills and knowledge on EMS content in all the component subjects that make up Economic and Management Sciences. They need financial literacy, entrepreneurship and business skills and knowledge about the economy.

Teachers need to know the value of Economic and Management Sciences. The importance of this Learning Area should be emphasised. There is need for a training session on this aspect. Which problems can this Learning Area solve? What contribution can this Learning Area make politically, economically, socially, physically and technologically to the country? When teachers know the importance of the Learning Area it will be easy for them to be passionate about it looking at the end results.

It will not be enough to only give teachers information that is required by the NCS.

EMS is a practical Learning Area that cannot be taught in isolation but through the context of the real business world to make it more interesting to the teachers and more relevant to the learners. It should enable the learners to acquire important life skills to survive in this complex economic world. Teachers need a ‘hands on’ type of training that will model what should be done in the classroom. Where possible, this should be done by the trainers who have the know how, the expertise and the passion for their subject and can transfer the passion to the teachers who will in turn pass it on to the learners.

Both the theoretical and practical part of EMS should be emphasised in the training. Relevant resource materials rich in information should be provided so that the teachers can have a something on which to fall back. Different

stakeholders involved in economic, financial and management matters should make available their materials as resource and reference material for teachers and learners. The materials should be simplified and attractive to suit all types of learning styles.

Training should encourage participation in the economy.

Teacher Support Materials and the type of training should answer and fill the gaps that were identified in this study and other related studies.

REFERENCES

Accenture. 2001. Liberating the Entrepreneurial Spirit. Executive Report.

Alberti, F, Sciasca, S. & Poli, A. 2004. Entrepreneurship Education: Notes on an ongoing debate. Paper presented at 14th Annual IntEnt Conference, Italy.

Antonites, A.J. & Van Vuuren, J.J. 2004. An action learning approach to entrepreneurial creativity, innovation and opportunity finding. Paper presented at 14th Annual IntEnt Conference, Italy.

Ashmore, C. 2001. An Entrepreneurial culture in the schools. EntrepreNews & Views, A New Venture in Vocational Education: The Consortium for Entrepreneurship Education, Volume 6(1)

Ashmore, C. 2001. Entrepreneurship shapes the Economy. EntrepreNews & Views, A New Venture in Vocational Education: The Consortium for Entrepreneurship Education, Volume 8(2)

Ashmore, C. 2001. Criteria for youth Entrepreneurship Education. EntrepreNews & Views, A New Venture in Vocational Education: The Consortium for Entrepreneurship Education, Volume 9(2)

Ashmore, C. 2001. Never too young? EntrepreNews & Views, A New Venture in Vocational Education: The Consortium for Entrepreneurship Education, Volume 9(4)

Badsha, N. 2000. The transformation of higher education in South Africa: the challenges of policy implementation. Paper presented at the 14th Conference of Commonwealth Education Ministers and Parallel International Symposium, Canada.

Bell, J. Callaghan, I. Demick, D. & Scharf, F. 2004.Internationalising Entrepreneurship Education. Journal of International Entrepreneurship; Vol 2,109-124

Brantley, C.P. & Davis, B.J. 1997. The Changing Dimensions of Business Education. National Business Education Association.

Brockhaus, R.H., Hills, G.E., Klandt, H. & Welsch , H.P. 2001. Entrepreneurship Education: A global view. Ashgate

Buckingham, A. & Saunders, P. 2004. The Survey Methods Workbook. Politi.

Burger, L., O'Neill, C. & Mahadea, D. 2005. The impact of previous knowledge and experience on the entrepreneurial attitudes of Grade 12 learners. South African Journal of Education, Vol 25 (2) 89-94

Communiké. 2004. The youth must be masters of their own destiny. http://www.up.ac.za/academic/economic/ communiké%202000/youth7.htm.

Conley, M. & Pattersion. C. 2000. 14CCEM Parallel Symposium Commonwealth Knowledge Solutions. Paper presented at the 14th Conference of Commonwealth Education Ministers and Parallel International Symposium, Canada.

Cooper, D.R. & Schindler, P.S. 2001. Business Research Methods. McGraw-Hill Irwin.

De Beer, A., Brandt, C. & Jacobs, H. 2004. The impact of an action learning set to empower learners to become entrepreneurs and lifelong learners: A South African study. Paper presented at the ICSB World Conference, San Juan, and Puerto Rico.

De Faoite, D., Henry, C., Johnston, K. & van der Sijde, P. 2003. Education and training for entrepreneurs: a consideration of initiatives in Ireland and the Netherlands.Education and Training. London.Vol.45, Iss.8/9; pg.430

DoE (Department of Education, RSA).2002. National Curriculum Statement Grade R-9. Economic and Management Sciences . Pretoria. Government Printers.

Driver, A , Wood, E., Segal, N. & Herrington, M. 2001. Global Entrepreneurship Monitor. South African Executive Re:ort. Cape Town; Graduate School. Cape Town

Federal Ministry of Education, Seychelles. 2000. Imagining a nation's future: education and the challenge of democratic participation in an evolving society. Paper presented at the 14th Conference of Commonwealth Education Ministers and Parallel International Symposium, Canada.

Fink, A. 2003. How to Manage, Analyse, and Interpret Survey Data. The survey kit. Sage Pubications.

Foxtrot, M. L., Wood, E., Kew, J., Herrington, M. & Segal, N. 2002. Global Entrepreneurship Monitor. South African Executive Report. Graduate School. Cape Town.

Gamage, A.S. 2004. Training and Development Practices in Manufacturing SMEs in Japan: An empirical analysis. Paper presented at 14th Annual IntEnt Conference, Italy.

Gouws, E. 1997. Entrepreneurship education: an educational perspective. South African Journal of Education, Vol 17:143-149.

Gouws, E. 2002. Entrepreneurship education: implications for teacher training. South African Journal of Education, Vol 16(2) 41-47

Green paper. 2003. Opinion of the European Economic and Social Committee on the: Green Paper- Entrepreneurship in Europe. Brussels. www.esc.eu.int.

Harper, D. A. 2002. Foundations of Entrepreneurship and Economic Development. Routledge.

Havlicek, J., Hron, J. & Ticha, I. 2004. Training needs for small-scale SMEs in regions. Paper presented at 14th Annual IntEnt Conference, Italy.

Henry, C., Hill, F. & Leitch, C. 2003. Entrepreneurship Education and Training. Ashgate

Hill, C. W. L. 2003. International Business. Competing in the Global Marketplace. Boston: McGraw-Hill/Irwin.

Hisrich, R. D., & Peters, M. P. 2002. *Entrepreneurship*. Boston:McGrawHill.

Kirby, D. A. 2002. Entrepreneurship Education: Can Business Schools meet the Challenge? Paper presented at the ICSB World Conference, San Juan, and Puerto Rico.

Kroon, J., de Klerk, S. & Dippenaar. A. 2003. Developing the next generation of potential entrepreneurs co-operation between schools and business? South African Journal of Education, Vol 23(4) 319-322.

Kroon, J. & Meyer, S. 2001. The role of entrepreneurship education in career expectations of students. South African Journal of Education, Vol 15 no 1:47-52

Krueger, N.F. Reilly .M. D., & Carsrud . A .L. 2000. Competing models of entrepreneurial intentions. Journal of Business Venturing. Volume 15,411-432

Lancaster, G. 2005. Research methods in Management: a concise introduction to research in management and business consultancy. Elsevier. Butterworth.

Leko-Simic, M. & Oberman, S. 2004. Business Education in Croatia:The transitional Challenge. Paper presented at 14th Annual IntEnt Conference, Italy.

Le Roux, A.S. 2004. Entrepreneurial Training and Development: Holistic Approach to New Venture Creation in the Republic of South Africa. Paper presented at 14th Annual IntEnt Conference, Italy.

Le Roux, I. 2003. Economic and Management Science Learning Area of Curriculum 2005 and entrepreneurial orientation. Dissertation as part of the degree of Mphil in Entrepreneurship and Small Business Management. Pretoria: University of Pretoria

Locke, R. R. & Schöne, K. 2004. The Entrepreneurial Shift: Americanization in European High-Technology Management Education. Cambridge.

Macfarlane, B. & Ottewill, R. 2001. Effective learning and teaching in Business and Management. ILT. Higher.

Maclean, C., Semmens, M. & Farall, N. 2004. Enterprise & Entrepreneurship: A case Study Introducing Enterprise Learning and Entrepreneurship in an HE Environment, in line with Individual Needs, Regional and Economic Strategy, National and International Developments. Paper presented at 14th Annual IntEnt Conference, Italy.

Magnusson, D. 1967. Test Theory. Reading Mass:Addison- Wesley Publishing company

Mapolelo, D. C. 2003. Case studies of beliefs of two in-service primary school teachers. South African Journal of Education, Vol 23(1) 71-77

Meibom, H. 2003. Learning and teaching Entrepreneurship: How to reformulate the Question? Paper presented at 13th Global IntEnt Conference, Grenoble/France

Mouton, J., Wildschut , L & Boshoff, N. 2000. Programme Evaluation Research Training Programme. Cenis & Era. University of Stellenbosch.

Naude, W. & Krugell. W. 2003. Management Dynamics .Volume 12

National Environmental Education Project for the General Education and Training (NEEP-GET). 2004. Supporting environment in the curriculum: Lesson planning for a healthy environment. Pretoria: Government Printers.

Nieman, G., Hough, J. & Niewenhuizen, C. 2003. Entrepreneurship: A South African Perspective.Pretoria: Van Schaick Publishers.

Nieuwenhuizen, C. & Groenwald, D. 2004. Entrepreneurship training and education needs as determined by the brain preference profiles of successful, established entrepreneurs. Paper presented at 14th Annual IntEnt Conference, Italy.

Omsobomvu. 2005. Omsobomvu's contribution towards increasing South Africa's entrepreneurial activity. Presentation at Economic and Management Sciences Learning Area.

Orford, J., Herrington, M. & Wood, E. 2004. Global Entrepreneurship Monitor. South African Executive Report 2004.University of Cape Town. The Graduate School of Business

Orford, J. 2005. Entrepreneurship Teaching in South African schools: A brief review of national policy and implementation issues. Prepared for South African Institute of Entrepreneurship.

Pammer, H. 2000. The Didactic Benefits of Business Simulations. Computer Assisted Business Simulation, www.cabs.de

Partington, D. 2002. Essential Skills for Management Research. Sage Publications.

Pihie, Z.A.L., Hamid, J.A. & Jusoh, R. 2004. Teaching strategies employed by lecturers in teaching business and entrepreneurship components. Paper presented at 14th Annual IntEnt Conference, Italy.

Ramakrishnan, J. 2000. Corporate Location.2nd Quarter . Milton Keynes

Ratteree, B. 2000. Lifelong learning and implications for the teaching profession. Paper presented at the 14th Conference of Commonwealth Education Ministers and Parallel International Symposium, Canada.

Remes, L. 2003. Entrepreneurship should hide at school. Jyväskylä Studies in Education, Psychology and Social Research. Jyväskylä University.

O'Sullivan, E., Rassel, G.R. & Berner, M. 2003. Research Methods for public Administrators. Addison Wesley Longman.

.

Sears D.O., Peplau A. & Freedman. 1988. Social Psychology. Prentice-Hall International Editions.

Slavin, R.E.1991. Educational Psychology. Allyn and Bacon.

Timmons, J.A. 2000. New venture creation: entrepreneurship for the 21st century. Burr Ridge: Irwin.

Timmons, J.A. & Spinelli, S. 2004. New venture creation: entrepreneurship for the 21st century. Burr Ridge: Irwin.

Veciana, J.M., Aponte, M. & Urbano, D. 2005. University Students' attitudes Towards Entrepreneurship : A two Countries Comparison. International Entrepreneurship and Management Journal, (1): 165-182

Von Broembsen, M., Wood, E. & Herrington, M. 2005. Global Entrepreneurship Monitor. South African Executive Report 2005.. The Graduate School of Business. Cape Town: University of Cape Town

ANNEXURE 1: QUESTIONNAIRE

Dear Respondent

Thank you for giving up your precious time to make this research possible. The statements are made in relation to your teaching of the Economic and Management Sciences (EMS) Learning Area.

The following questionnaire is part of an extensive research study, undertaken to investigate your perception of the knowledge and skills necessary to effectively implement the EMS Learning Area. Your personal thinking is crucial. An honest self-evaluation is highly recommended in order to get the desired results.

There are no wrong and right answers but it is important to indicate your personal view and thinking irrespective of what you may believe others will think.

It will be highly appreciated if you would complete it as thoroughly as possible. All information will be treated as confidential and will only be used for academic purposes and reported as mathematical averages, variances and correlations. It will also be used for the Department of Education to take the necessary steps.

MB Mashiapata
MPhil Candidate
University of Pretoria
Cell: 082 464 1257
Tel: 012 345 1839 (H)
Tel:012 312 5157(W)

Study Leader: Dr Ingrid le Roux
Chair of Entrepreneurship
Tel (012) 420 4773
Cell:083 556 3169

Instructions for completion:

1. Please answer all questions accurately, objectively and as extensive as possible.
2. Make a cross (**X**) in the space provided which reflects your answer / choice most accurately, for each of the questions.
3. Where asked for comments or to specify, please keep these as brief and clear as possible.
4. Do not ponder too long on a question - your first thoughts are important.
5. Please answer the questions in sequence and do not go back to change previous answers

1=	Disagree strongly	If you want to answer no, no
2=	Disagree	If you want to answer no
3=	Agree	If you want to answer yes
4=	Agree strongly	If you want to answer yes, yes

					For office use only	
1. I have confidence in my ability to teach EMS	1	2	3	4	V1	
2.Teaching EMS is interesting to me	1	2	3	4	V2	
3. Teaching EMS is challenging to me	1	2	3	4	V3	
4. I find it difficult to teach EMS	1	2	3	4	V4	
5. Teaching EMS is outside the capabilities of most teachers	1	2	3	4	V5	
6.I have intentions to study further in EMS	1	2	3	4	V6	
7. I understand why GET, Grade R-9 learners have to be exposed to EMS	1	2	3	4	V7	

Mastery of EMS Learning Outcome 1:The economic cycle

8. I can explain what an “economic cycle” is	1	2	3	4	V8	
9.I can explain the roles, rights and responsibilities of all the role players in the economy	1	2	3	4	V9	
10. I can explain how trade (imports and exports) address the economic problem	1	2	3	4	V10	
11. I can explain the working of the South African economy	1	2	3	4	V11	
12. I can explain how the national budget functions in the economy.	1	2	3	4	V12	

Mastery of EMS Learning Outcome 2: Sustainable growth and development

13. I know what economic growth entails	1	2	3	4	V13	
14. I can explain the impact of economic growth and development on the development of the community and the society	1	2	3	4	V14	

1	2	3	4
Strongly disagree	**Disagree**	**Agree**	**Strongly Agree**

15. I can explain the value of savings and investments in growing the economy	1	2	3	4		V15		
16. I can explain the value of productivity on economic prosperity, growth and global competition	1	2	3	4		V16		
17. I can motivate the learners to explore personal steps to improve their standard of living	1	2	3	4		V17		

Mastery of EMS Learning Outcome 3 Managerial, consumer and financial knowledge and skills

18. I can do basic financial calculations	1	2	3	4		V18		
19. I can explain how personal budgets work	1	2	3	4		V19		
20. I can assist the learners in the actual production process of goods from raw materials to final products	1	2	3	4		V20		
21. I am familiar with the financial concepts used in business	1	2	3	4		V21		
22. I can explain how to complete an income statement and balance sheet for a business	1	2	3	4		V22		

Mastery of EMS Learning Outcome 4: Entrepreneurial knowledge and skills

23.Enough time is allocated to LO 4: entrepreneurial knowledge and skills	1	2	3	4		V23		
24.Schools expose learners to entrepreneurial knowledge and skills as required by the Learning Outcome 4 of EMS Learning Area	1	2	3	4		V24		
25. I can see the link between Entrepreneurship education and economic growth and development of the country	1	2	3	4		V25		

1	2	3	4
Strongly disagree	**Disagree**	**Agree**	**Strongly Agree**

26. I have adequate knowledge on what entrepreneurship entails.	1	2	3	4	V26	
27.I can identify business opportunities	1	2	3	4	V27	
28. I can perform SWOT Analysis	1	2	3	4	V28	
29. I can draw up a business plan	1	2	3	4	V29	
30. I can assist learners in running a real business	1	2	3	4	V30	
31. I can assist learners in participating in joint ventures between the school and the community/parents	1	2	3	4	V31	
32. I can assist learners in keeping financial records of their businesses	1	2	3	4	V32	
33. I can motivate the learners to become entrepreneurs	1	2	3	4	V33	
34. I have the necessary knowledge, skills and attitude to teach entrepreneurship	1	2	3	4	V34	
35. I have the necessary entrepreneurial knowledge to act as an adviser to the learners	1	2	3	4	V35	
36.I have the necessary business skills to act as a mentor to the learners	1	2	3	4	V36	
37.Entrepreneurship in schools encourages experiential learning that allows learners to engage in practical business activities	1	2	3	4	V37	
38.Entrepreneurship Education would generate more and better entrepreneurs than there have been in the past	1	2	3	4	V38	
39.There is a wide spread idea that education would increase the chances of obtaining entrepreneurial success.		1	2	3	4	V39	

1	2	3	4
Strongly disagree	**Disagree**	**Agree**	**Strongly Agree**

40. There is adequate time to cover all EMS Learning Outcomes	1	2	3	4	V40	

Training

41. To ensure effective teaching of EMS teachers will need help in the form of short courses offered by Higher Education Institutions with Accreditation	1	2	3	4	V41	
42. To ensure effective teaching of EMS teachers will need help in the form of teacher workshops	1	2	3	4	V42	
43. To ensure effective teaching of EMS teachers will need help in the form of support from District Officials	1	2	3	4	V43	
44. To ensure effective teaching of EMS teachers will need more EMS Teacher Support Materials	1	2	3	4	V44	
45. Teachers do not need any help to ensure effective teaching of EMS	1	2	3	4	V45	
46. Teachers need more training in Business skills to ensure effective teaching of EMS	1	2	3	4	V46	

47 In your opinion entrepreneurship means (give an explanation)

V47	V48	V49

48. In your opinion productivity means (give an explanation)

V50	V51	V52

49. In your opinion, what do you think should be done to make the implementation of EMS effective in South African schools (to make the teachers teach EMS with confidence and passion)

V53	V54	V55

50. In your opinion, what type of training in EMS will appeal more to teachers

V56	V57	V58

51. In your opinion, what type of skills do EMS teachers need for the effective implementation of EMS Learning Area.

V59	V60	V61

52. In your opinion what type of knowledge do EMS teachers need for the effective implementation of EMS Learning Area

V62	V63	V64

53. What type of limitations do you experience in the implementation of EMS Learning Area (Name five and prioritise from most limiting

V65		V66		V67		V68		V69	

Bibliographic Information

54. School /address:_____

V70		

55.District:_____

V71		

56.Province:_____

V72		

57.For classification purposes, please indicate your gender

Male		V73	
Female			

58. Race

Black	1	V74	
White	2		
Asian	3		
Coloured	4		
European	5		

59.Age

20 – 25	1	V75	
25 – 35	2		
36 – 45	3		
46 – 55	4		
55 +	5		

60.Highest level of education

Certificate	1	V76	
Diploma	2		
Degree	3		
Honours	4		
Masters	5		
Doctorate	6		

61.Highest level of exposure of Economic and Management Sciences knowledge or commercial subjects at

High school level	1	V77	
Technicon	2		
University	3		
Technical	4		
No knowledge acquired	5		
Reading out of	6		

interest	

62. In my studies I was exposed to the following subjects

Accounting	1
Business Economics	2
Economics	3
Mercantile Law	4
Typing	5
Commercial Maths	6
Entrepreneurship	7
Computer Science	8

V78	V79	V80	V81	V82	V83	V84	V85

63. I teach EMS because

I am qualified	1	V86	
I am interested	2		
I have to (forced because there is no one qualified to teach EMS in my school)	3		

64. I teach the following Grades

Grade R-3		V87	
Grade 4-6		V88	
Grade 7-9		V89	

THANK YOU FOR YOUR CO-OPERATION – I APPRECIATE IT VERY MUCH.