

Chapter 1: Background and orientation of the problem

1.1 Introduction

In spite of the impressive proliferation of the entrepreneurial education and training courses in the 1980s and 1990s, little is known about the performance, effectiveness of this training or the extent to which it really matches the needs of target groups. Empirical research in this area remains the exception. Without a stringent feedback about the usefulness of the education programs, the contents and methods of courses stay to be “gospel” more than theoretically based teaching.

(Klandt 1993:13)

The Republic of South Africa, which forms the geographic scope of this study, has shown positive growth in respect of its economic environment after the demise of the apartheid era. It is, however, evident that certain critical economic and social aspects and indicators have not been addressed to the full. The World Competitiveness Report (2003) placed South Africa in the 18th position out of the measured 30 developed and newly industrialised countries in the world. Although the country still offers certain positive conditions (lowest living cost for employees, lowest electricity costs for businesses and relatively low income tax levels), it ranks of lowest in terms of the unemployment rate; short life expectancy; the level of economic literacy; the general skills level of employees; foreign direct investment, infrastructure and foreign exchange reserves.

Unemployment tends to be one of the major concerns with regards to economic growth. Van Tonder (2003:8) indicates that the economic growth of this country should be elevated to a towering 7.7% till the year 2014, in order to lower the extreme current unemployment rate of 29% to an acceptable level of 11%. The current unemployment rate implies

that approximately 13.5 million individuals are part of the economic active population of the country.

A high level of entrepreneurial activity in any country has the propensity to make a direct and positive impact on the elevation of unemployment and related concerns. Theodosiou (1996:19) argues that businesses with human resource relations of 1 to 19 (the so-called small business ventures) are already contributing about 47% of job creation in comparison to the 34% of the formal sector. It is also pointed out that about 10% of small business ventures are responsible for all new job opportunities that are created by the small business sector as a whole. These businesses are categorised within the “entrepreneurial sector” and it is this factor that differentiates them from other small business ventures.

Davidson et al. in Theodosiou (1996:19) point out that the development of new businesses plays a larger role in economic growth than the development of existing businesses. Supporting this fact, Radley (1996:37) argues that entrepreneurial activity is a prerequisite for the success of economic growth, development, social well-being and political stability. Mahadea (1994:42) adds that the “residual” hypothesis could play a part in the analysis of the varied economical growth in countries. Hereby it is understood that the influence of labour, capital and the residual element has a significant impact on economic growth. Entrepreneurship is seen as an essential element of the residual. Schumpeter, as quoted by Mahadea (1994:43), substantiates this statement as early as 1934 by regarding entrepreneurship as the primal driving force behind any economic development.

Kuratko and Hodgetts (1998:10) conclude by pointing out 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 worldwide.

This study differentiates between “entrepreneurship” and “small business management” and will be elaborated upon in Chapter 2. For the purpose of the study the entrepreneur as such is therefore defined as follows:

An entrepreneur would be an individual with the ability to realise a specific vision from virtually anything – a definite human creative action. A differentiating factor defining the true entrepreneur is represented by the entrepreneurial skills of creativity and innovation. The fundamental skill to "create" thus generating an idea, and the action of transforming it into a viable growth-oriented business forms an unconditional and integrated necessity in entrepreneurship training programmes. (*Own formulation.*)

The field of entrepreneurship in South Africa has certain unique although limiting characteristics. These traits contribute directly to the current symptoms, regarded as negative in the sense of economic development and growth of the country. Consequently, entrepreneurship in South Africa does not hold a strong position and, in fact, is generally approached with some degree of contempt.

The Global Entrepreneurship Monitor (GEM) is an executive report conducted annually in order to assess the current state of entrepreneurship in a specific country compared to the rest of the world. The 2002 report includes a comparison of 37 participating countries. The South African ranking constitutes the following results:

- South Africa is ranked in the 19th position in overall entrepreneurial activity with 6.54% of the adult population involved in an entrepreneurial venture established since January 1999. It is the lowest rating of all the so-called developing countries participating in the study (including Thailand, India, Chile, Argentina, Brazil, Mexico and South Africa).
- It holds the 15th position in start-up activity (a start-up is a business that has not paid salaries and wages for longer than three months), with just under 5% of the adult population involved in the start-up process.
- It is rated 29th in new firm activity (a new firm is a business that has paid salaries and wages for longer than three months, but less than 42 months), with only 2% of the adult population involved in this phase.
- South Africa holds the 9th position in necessity entrepreneurship (a necessity entrepreneur is involved in a new business because he/she has no other choice of work), with 2.38% of the adult population being necessity entrepreneurs.
- It is rated 29th in opportunity entrepreneurship (an opportunity entrepreneur is involved in a new business in order to pursue an opportunity), where 3.3% of the adult population are involved in pursuing exploitable opportunities.
- With regard to all measurement of entrepreneurship South Africa ranks lowest of all developing countries.
- Finally, in respect of opportunity entrepreneurship and new firm activity, South Africa is ranked in the lowest quartile of all the countries measured.

It is thus quite a negative scenario that arises concerning the role entrepreneurship has to play in South Africa. The relative importance

of entrepreneurship is, however, assessed as being of the utmost importance.

The following table compares South Africa's Total Entrepreneurial Activity (TEA) with the rest of the world (SA's figure of 6.54% means that approximately six out of every 100 adults of the population are entrepreneurs). "Entrepreneurial activity" implies that an individual is involved in starting a business.

Table 1: South Africa's TEA in relation to the rest of the world

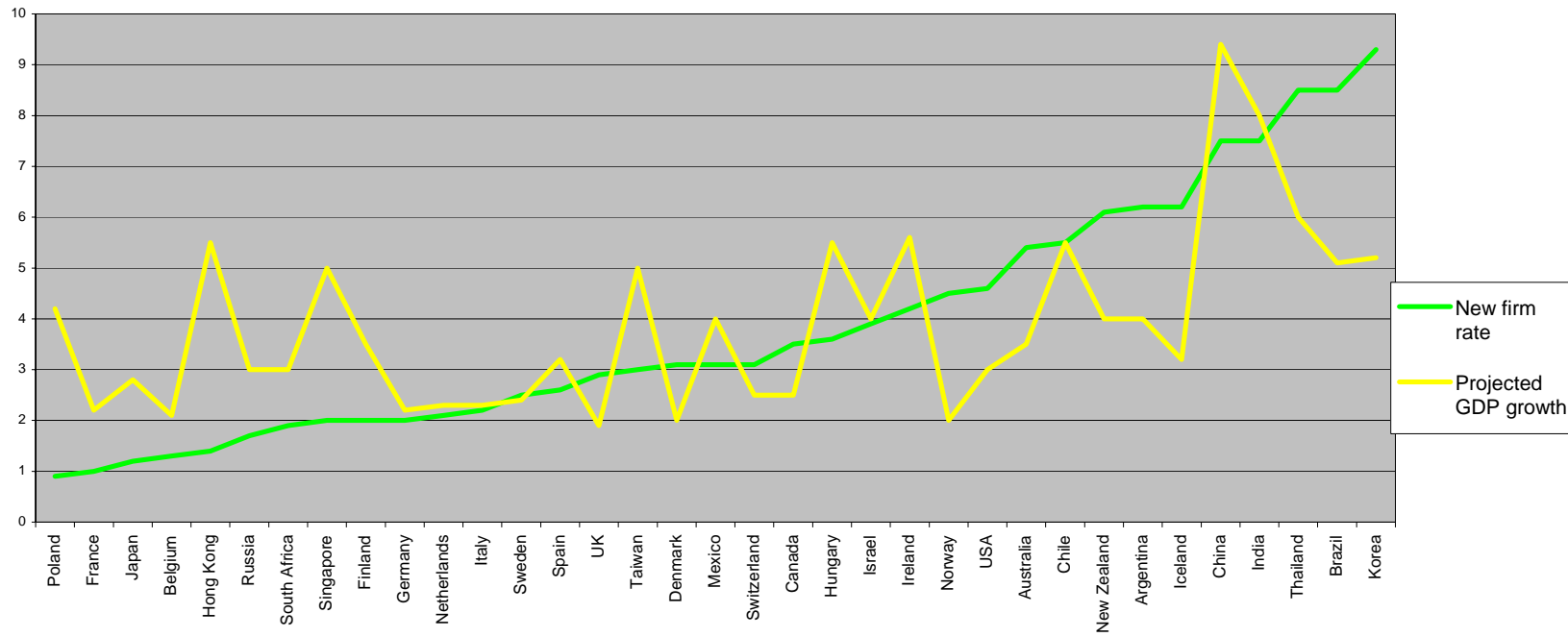
Country	TEA 2002	Necessity rate	Opportunity rate	Start-up rate	New firm rate	TEA 2001
1. THAILAND	18.9	3.35	15.31	11.63	8.4	n.a.
2. INDIA	17.88	5.04	12.42	10.89	7.45	11.55
3. CHILE	15.68	6.74	8.53	10.4	5.49	n.a.
4. KOREA	14.52	4.12	8.55	5.85	9.29	14.89
5. ARGENTINA	14.15	7.13	6.77	8.52	6.2	11.11
6. NEW ZEALAND	14.01	2.25	11.57	9.13	6.06	18.07
7. BRAZIL	13.53	7.5	5.78	5.69	8.46	12.74
8. MEXICO	12.4	2.7	8.28	9.18	3.22	20.73
9. CHINA	12.34	6.97	5.61	5.54	7.41	n.a.
10. ICELAND	11.32	0.92	8.62	5.65	6.23	n.a.
11. USA	10.51	1.15	9.11	7.09	4.57	11.61
12. IRELAND	9.14	1.38	7.77	5.66	4.2	12.23
13. CANADA	8.82	1.1	7.36	5.94	3.58	10.98
14. NORWAY	8.69	0.37	7.42	5.23	4.4	8.78
15. AUSTRALIA	8.68	1.53	6.69	3.76	5.22	15.5
16. SWITZERLAND	7.13	0.87	6.03	4.44	3.26	n.a.
17. ISRAEL	7.06	1.4	5.22	3.36	3.88	5.67
18. HUNGARY	6.64	2.11	4.0	3.49	3.62	11.43
19. SOUTH AFRICA	6.54	2.38	3.3	4.71	2.0	9.45
20. DENMARK	6.53	0.43	5.9	3.63	3.12	8.01
21. SINGAPORE	5.91	0.86	4.94	4.03	2.03	6.58
22. ITALY	5.9	0.53	3.34	3.74	2.35	10.16

23. UK	5.37	0.69	4.38	2.49	3.05	7.8
24. GERMANY	5.16	1.15	3.92	3.51	2.07	7.99
25. SLOVENIA	4.63	1.37	3.26	3.28	1.53	n.a.
26. NETHERLANDS	4.62	0.5	4.03	2.57	2.09	6.44
27. SPAIN	4.59	1.02	3.42	2.24	2.54	8.17
28. FINLAND	4.56	0.33	3.88	2.68	2.06	7.66
29. POLAND	4.44	1.27	2.84	3.67	0.77	9.97
30. TAIWAN	4.27	0.71	3.33	1.28	3.08	n.a.
31. SWEDEN	4	0.67	3.33	1.8	2.51	6.68
32. CROATIA	3.62	0.85	2.18	2.81	0.94	n.a.
33. HONG KONG	3.44	1.19	2.25	2.04	1.4	n.a.
34. FRANCE	3.2	0.09	2.84	2.4	0.86	7.37
35. BELGIUM	2.99	0.27	1.99	2.13	1.08	4.54
36. RUSSIA	2.52	0.56	1.9	1.09	1.54	6.93
37. JAPAN	1.81	0.51	1.24	0.87	1.04	5.19

(Source: Adapted from GEM (2002:10))

Entrepreneurship, as argued before, is meant to be an indicator for economic growth. The following figure correlates the entrepreneurial activity with lagged indicators of economic growth. Economic growth has been estimated, based on the projected figures for 2003-2004.

Figure 1: International comparison of new firm rates and forecast economic growth for 2003 - 2004



(Source: Adapted from GEM (2002:17))

Figure 1 shows that start-up and new firm rates correlates positively with projected economic growth.

It is furthermore meaningful to specify the gender and racial distribution of entrepreneurship in South Africa.

- **Gender**

Entrepreneurial activity among men is much higher than women. Men are twice more likely to be new firm entrepreneurs than women and one and a half times more likely to be owner-managers of an established business. Female entrepreneurs employ on average 1.7 people while males employ 3.5.

- **Race**

The following tables reflect the racial distribution of entrepreneurial activity in South Africa:

Table 2: Start-ups

Racial classification	Percentage of population
Coloured	5%
Indian	4.5%
Black	3.8%
White	3.8%

Table 3: New firms

Racial classification	Percentage of population
Coloured	3%
Indian	0.9%
Black	1.1%
White	3.6%

Table 4: Established firms

Racial classification	Percentage of population
Coloured	0.9%
Indian	3.2%
Black	2%
White	6.5%

South Africa's historical course shows that the above distribution of racial groups, relating to entrepreneurial activity, has not changed radically over time. The developmental gap between Previously Disadvantaged Individuals (PDIs) and the rest is, however, rather phenomenal and needs specific attention.

It is essential to note that the informal sector currently "employs" more than three million small business owners. This sector is also the primary location of black entrepreneurs. The entrepreneurs located here is faced with circumstances that greatly hamper growth. The table below shows the main obstacles experienced by entrepreneurs in both the formal and informal sector in South Africa:

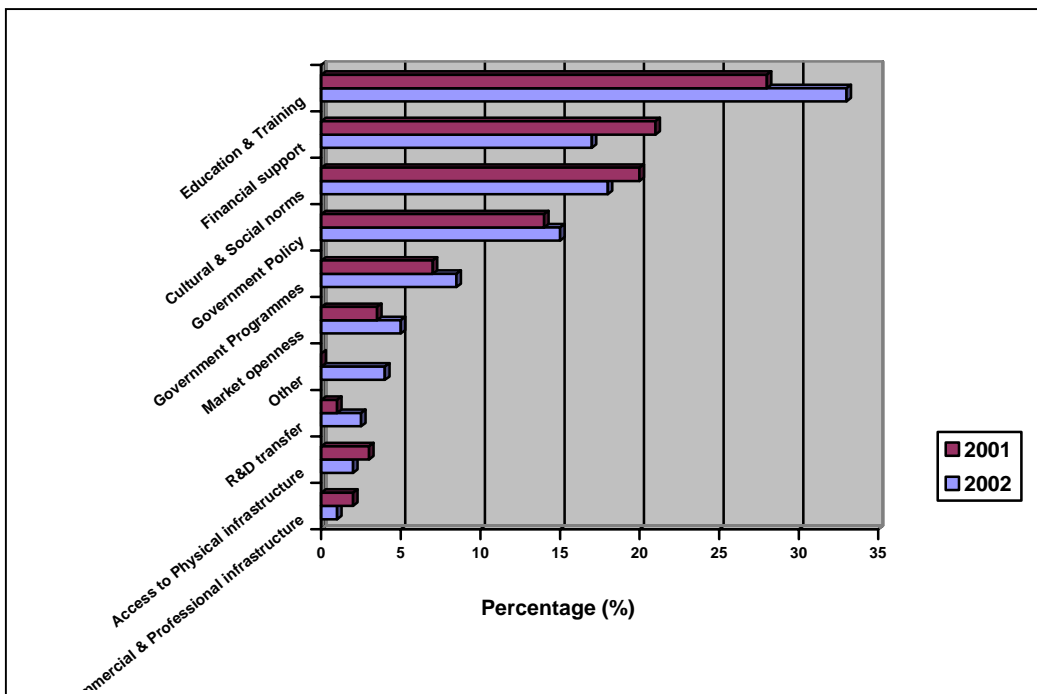
Table 5: Main obstacles experienced by entrepreneurs

	Formal	Informal
Lack of money for running costs	39%	65%
Lack of money to buy capital items	45%	63%
Transport	41%	50%
Weather	35%	43%
Competition	41%	40%
Theft	39%	32%
Unavailability of electricity	20%	34%
Lack of business skills	27%	33%
Unavailability of water	16%	31%

(Source: Adapted from GEM (2002:32))

One of the main problem areas in the field is the role of education and training in the generation of entrepreneurial activity. The GEM report provides unquestionable evidence regarding the importance of entrepreneurship education and training, which is reflected in Figure 2.

Figure 2: The role of entrepreneurship education and training



(Source: Adapted from GEM (2002:46))

Notwithstanding the general need for education and training in the field, critical issues surround the phenomenon on a global level (with specific reference to the content of entrepreneurship programmes).

Garavan and O' Cinneide (1994:3-12) believe that the field lacks a generally accepted paradigm or theory regarding the contents of entrepreneurship education and training. They refer to the following researchers in substantiation of their opinion: Sexton & Bowman (1984); McMullan & Long (1988); Hills (1989) and Vesper (1990). Reid (1987) elaborates on the issue when he states that current literature on entrepreneurship education and training only touches the surface as far as the design of content is concerned. Attention is mainly focused on one aspect of a total training programme.

The above arguments are supported by this study when an attempt is made to formalise the problem in terms of real problem areas and shortcomings (as derived from entrepreneurship research literature).

1.2 Problem statement

The introductory part of this chapter highlighted the general problems and issues pertaining to entrepreneurship in South Africa and also the education and training of entrepreneurs. This statement outlines the background problem of the study.

The analysis of secondary data, as conducted by Antonites and Van Vuuren (2002), indicates a fundamental difference between the applications of certain or preferable concepts in a training context. The average as calculated from the compilation of the results of 13 concepts, is 49%. This might pertain to 49% consensus regarding the *compilation of content* or can enlighten individual constructs that could, to a lesser

extent, be applied as content. This in itself illustrates the fragmentary and insubstantial nature of entrepreneurship research (as supported by Cooper et al. 1994; Low & MacMillan 1988; Storey 1994; Wiklund, Davidson, Delmar & Aronson 1997 in Dahlqvist, Davidsson & Wiklund 1999).

A differentiating trait of the entrepreneur is the existence of the following entrepreneurial skills: Creativity, innovation and opportunity finding (also known as CIO). These concepts form the primary focus of the study (within an entrepreneurship training context), based on the findings of Antonites and Van Vuuren (2002). Their study indicated the fundamental importance of these skills. A figure of 74% showed that creativity, innovation and opportunity finding are included in entrepreneurship programmes, as assessed. The content of these concepts, as included in training programmes, has however not been agreed upon.

Carrier (1999:27) supports this fact by mentioning the following problem areas in the field:

- The lack of models addressing the creativity, innovation and opportunity finding issues directly, as part of entrepreneurship training.
- A lack of proper differentiation between a business idea and an opportunity, in a training context.
- Less emphasis on the pre-entrepreneurial phase of actively seeking business opportunities.
- A total lack of tools, textbooks and approaches to cultivate CIO (creativity, innovation and opportunity finding).
- CIO-stifling pedagogical paradigms in teaching business and entrepreneurship.

The specific research problem of this study is the lack of a focused approach in the training and development of the entrepreneurial skills: Creativity, innovation and opportunity finding.

1.3 Research objectives

The study endeavors to prove that the content of a Creativity, Innovation and Opportunity finding training model (CIO), within an entrepreneurial context, will contribute to the development of new products, services and or processes and their likely commercial success. The problem of “content” with regards to entrepreneurial skills training is addressed, as is the contribution of the content accompanied by an action learning training methodology.

This study thus illustrates the training methodology that is used to enhance the level of creativity and innovation of the entrepreneurship learner, as part of the BCom degree with specialization in Entrepreneurship at the University of Pretoria, South Africa. This module forms part of the $E/P = M (E/S \times B/S)$ training model (*The Entrepreneurship training model*) as applied in this programme.

A body of secondary research with regards to entrepreneurship training; creativity, innovation and opportunity finding; as well as the content and methodology used in the CIO training will be provided.

1.4 Propositions

Cooper & Emory (1995) defined propositions as “a statement about concepts that may be judged as true or false if it refers to observable phenomena”. The following propositions will be tested by means of the empirical study:

Proposition 1:

Experimental group 1 (treated) will show significantly higher scores on the likely commercial success of innovations, than the Control group.

Proposition 2:

Experimental group 2 (treated) will show significantly higher scores on the likely commercial success of innovations, than the Control group.

Proposition 3:

Experimental group 1 (treated) and Experimental group 2 (treated) will show significantly higher scores on the likely commercial success of innovations, than the Control group.

Proposition 4:

Experimental group 1 (treated) will show significantly higher scores on the likely commercial success of innovations, than Experimental group 2 (treated).

Proposition 5:

No significant differences exist between the Experimental groups and Control group with regards to the likely commercial success of innovations.

1.5 Demarcation, scope and limitations of the study

1.5.1 Demarcation and scope of the study

The study was concerned with the assessment of the likely success of a creativity, innovation and opportunity finding training intervention, within an entrepreneurship training context. The CIO training model (Creativity, Innovation and Opportunity finding) was applied to the second year of *Baccalaureus Commercii* (BCom) degree specialising in Entrepreneurship, at the University of Pretoria, South Africa. The timeframe ranges from 1999 to 2002. An action learning approach was applied within an experiential learning context. Consequently, the action learning set is defined as being applicable to second-year entrepreneurship learners. The training model forms part of a programme that focuses on the acquisition of entrepreneurial and business skills. The following table displays the curriculum content of the entrepreneurship training programme:

Table 6: The Entrepreneurship training model

Entrepreneurial Performance (E/P)	Performance motivation (M)	Entrepreneurial skills (E/S)	Business skills (B/S)
<ul style="list-style-type: none"> ▪ Establishment of own business 	<ul style="list-style-type: none"> ▪ Performance motivation 	<ul style="list-style-type: none"> ▪ Risk propensity 	<ul style="list-style-type: none"> ▪ General management skills
<ul style="list-style-type: none"> ▪ Completion of first transactions 		<ul style="list-style-type: none"> ▪ Creativity and Innovation 	<ul style="list-style-type: none"> ▪ Marketing skills
<ul style="list-style-type: none"> ▪ Growth in net value of business 		<ul style="list-style-type: none"> ▪ Opportunity identification 	<ul style="list-style-type: none"> ▪ Legal skills
<ul style="list-style-type: none"> ▪ Recruitment of employees 		<ul style="list-style-type: none"> ▪ Role models 	<ul style="list-style-type: none"> ▪ Operational skills
<ul style="list-style-type: none"> ▪ Increasing productivity levels 			<ul style="list-style-type: none"> ▪ Human resource management skills
<ul style="list-style-type: none"> ▪ Increasing profitability 			<ul style="list-style-type: none"> ▪ Communication skills
			<ul style="list-style-type: none"> ▪ Business plan

(Source: Adapted from Antonites (2000:21))

The above content will be described in greater detail by means of the literature review. The study's primary objective is to test the effect of the training intervention with conceptually a new product, service or process as outcome. Creativity, innovation and opportunity creates the platform for inducing the latter.

1.5.2 Limitations of the study

A major limitation in this study is the novel nature of the field of entrepreneurship and likewise the content of training models in this context. The training of entrepreneurs in South Africa is still in a developmental phase. Little consensus on the content of training programmes exists. Out of an international perspective it has to be taken into consideration that the science of entrepreneurship is new with obvious limits in terms of available research.

The existence of literature and or practical examples with regards to creativity, innovation and opportunity finding in an entrepreneurial context is even more confined. In a number of cases the bibliographical evidence mentions the importance of these concepts, but only a few of these indicate the curriculum content, training methodology and the success rate of learning outcomes and or training models. This study is therefore pioneering in respect of of the application and testing of these entrepreneurial skills.

1.6 Importance and benefits of study

The novel nature and short history of entrepreneurship creates a need for developing the science to the full. A critical and inducing element in the development of entrepreneurs in South Africa is based on the education and training of the potential and the existing. Various studies

address the need for training in this field, but a lack of consensus-based-content development is still present. This study firstly provides guidance to the *entrepreneurship trainer/academic* with regards to:

- The content of an entrepreneurial skills training model (Creativity, innovation and opportunity finding).
- A unique training process, methodology and parameters.
- The distinctive outcomes of implementing such a training model.

The second beneficiary in this study is the *entrepreneurship learner*, in respect of whom the following benefits are realised:

- A higher level of creativity is achieved as an outcome.
- A unique flexible and action learning approach is applied that facilitates the foregoing.
- New products, services or processes are developed (conceptually) with a higher level of likely commercial success in the market place. The potential entrepreneur therefore already creates a potential business concept with a future entrepreneurial career opportunity to exploit.
- The goal of true entrepreneurship is achieved.

The third beneficiary is the *economic environment of South Africa*, in respect of which the benefits are achieved by means of:

- A contribution to new product development that will enhance economic growth and international competitiveness.
- Potentially limiting the growth of the unemployment rate.
- The development of potential entrepreneurs as future business leaders in the South African and international field of business.

1.7 Research design

The following framework served as the basis of the research design:

1.7.1 Experimental design

The study consists out of two basic components as part of the research methodology. The first part constitutes the compilation of secondary data or a literature review, while the second consists of an empirical component.

The empirical method is embedded in an experimental design. Zickmund (1997:307) defines the experimental design as one that exists as a method based on the manipulation of a variable with the sequential testing of causal relationships among variables.

The experimental design consists of an independent variable that serves as the manipulated entity. The experimental design of the study involves the treatment or the independent variable as the CIO training model with an experimental group (entrepreneurship learners) and a control group (business learners not specialising in entrepreneurship).

The *Innovator* © (see Addendum), a measurement instrument that tests the likely success of new products, services or processes, serves as the dependent variable or criteria for judgement. Williams (1999) developed the questionnaire. The test units are firstly the learners specialising in entrepreneurship and secondly learners not specialising in entrepreneurship but in general business studies.

The treatment (independent variable) was conducted in a controlled research environment (non-laboratory), therefore striving towards a

“constancy of conditions”. Extraneous variables were limited as far as possible but interference was present. The main interference was non-class attendance, whereby some learners missed out on the process approach as part of the action learning paradigm applied in this programme.

1.7.2 Internal validity

Zickmund (1997:308) categorises six different types of extraneous variables that may influence internal validity negatively: History, maturation, testing, instrumentation, selection and mortality. Internal validity may, to a limited extent, be affected due to the unknown background or experience (history) of the learners (in both cases: treated and control groups). The experimental treatment (training programme) can therefore not be seen as the sole cause of observed changes in the dependent variable. The age distribution of learners ranged between 19 to 22 years and can to a great extent be generalised as limited business experience. Hence it provides relatively high evidence of internal validity.

1.7.3 External validity

The measurement instrument (*Innovator* ©) has been developed on the basis of the needs of the external business environment. It therefore measures the likely commercial success of new products, services or processes (innovations) in the market place. The external validity of the results tends to be positive, while research results can be generalised to the external environment.

1.7.4 Classification of experimental design

This study is based on the Campbell and Stanley symbolisation, in which:

X = exposure of a group to an experimental treatment

O = observation or measurement of the dependent variable.

The classification of this study is a “**static group design**”. A static group design implies that an “after-only” design is present. The treated group is measured after treatment (the CIO training programme) took place and the control group is measured without a treatment intervention (the CIO training programme). The experimental symbolisation can be illustrated as follows:

Experimental group:	X	O₁
Control group:		O₂
Where the effect of the experimental treatment equals $O_2 - O_1$		

1.8 Programme of investigation

The investigation started with a broad to specific literature review. The literature review explains the nature of entrepreneurship training and also provides an elaboration on the concepts of creativity, innovation and opportunity finding. A discussion on the content and learning methodology of the CIO training model, that was practiced and tested, follows. The third section refers to the research methodology applied

and the fourth presents a summary of findings, a conclusion and recommendation.

Chapter one: Background and orientation of the problem

The first chapter offers a background to the focus of the study within a South African context. The following analogy is followed: The South African economy; The role of entrepreneurship in economic growth; Defining the entrepreneur (briefly); The state of entrepreneurship in South Africa; Entrepreneurship education and training in South Africa (briefly); The focus on creativity, innovation and opportunity finding. The problem statement is followed by the research question, definition of terms, demarcation, scope and limitation of the study.

Chapter two: Entrepreneurship training

This chapter gives a broad spectrum of existing literature concerning entrepreneurship training. It starts with a background discussion on the training of entrepreneurs *per se*. The entrepreneur is then conceptualised and defined to provide a proper orientation towards the field of study. An indication of research in the field of entrepreneurship is presented, followed by an in-depth contribution on the training of entrepreneurs.

The section on “the training in entrepreneurship” is supported by a literature review which combines entrepreneurship as a subject and the entrepreneurship training model. The final outcome of any entrepreneurship training programme, namely entrepreneurial performance, is discussed, accompanied by a brief explanation of performance motivation and the following entrepreneurial skills: Creativity, innovation, opportunity finding, risk propensity and role

models. The content of business skills training (B/S) is excluded in the literature review but inclusive to the total entrepreneurship training model as applied in practice.

Chapter three: The concepts: Creativity, innovation and opportunity finding

Chapter three narrows the literature review to the primary focus of this study, namely creativity, innovation and opportunity finding. The core facilitator that induces the final outcome of the training model is creativity. Special reference is made to the theoretical nature of creativity and this is structured as follows: Historical background of creativity; Obstacles in creative theory; Creativity defined, based on the 4Ps model of creativity (person, process, press and product); The creative process; Barriers to creativity and the Myths to creativity. The concept of innovation is then discussed as being the result of creative thinking and action, followed by Opportunity finding. The concluding part of the chapter describes Training in creativity, innovation and opportunity finding in an entrepreneurial context, to provide a fitting introduction to the next chapter.

Chapter four: The Creativity, innovation and opportunity finding training model (CIO training model)

The fourth chapter contains the literature review and practical implications, and is divided into the following topics: Background to the development of the training model and the methodological framework of the model with regards to action learning in an experiential learning context. The chapter endeavours to exhibit the content of the CIO training model as well as the different phases integrated in the application thereof.

Chapter five: Research procedures and methodology

The research methodology, as aligned with the research design, is explained. The chapter describes the decision on samples and the measurement instrument applied (*Innovator* ©). The last section of the chapter elaborates on the theory behind the research methodology as represented in the research process.

Chapter six: Analysis and discussion of results

This chapter reflect an in depth analysis of the data obtained in this study. The first section explains the demographic profile of the respondent groups. The formation of certain factors on which the control group and experimental groups are compared is indicated in the second part. This subsection also includes the reliability of each factor. A third subsection compares the experimental groups with the control group, on these factors.

Chapter seven: Summary and recommendations

Chapter 7 portrays confirmation on the results both based on literature and empiric information. The significant differences among the groups are discussed and the propositions are likewise accepted or rejected. The final part of the chapter provides recommendations on primarily future research in this field, where the CIO training model may serve as a fundamental platform.

1.9 Conclusion

Many researchers in this field emphasise the need for and the lack of training models involving entrepreneurship. This study demonstrates a new action learning approach and model, developed to increase creative and innovative behaviour and the actions of the entrepreneurship learner.

The need for entrepreneurship training in South Africa is a given fact upon which any further elaboration is unnecessary. Although unique in a fundamental sense, it is still evident that the pedagogical paradigms regarding CIO (Creativity, Innovation and Opportunity finding) also lack new approaches and successful outcomes.

The juvenile nature of entrepreneurship as an applied science leads to a total absence of general consensus on issues such as research methods, concepts, data or generally accepted modes of behaviour (especially in a training context). We are therefore dealing with a situation where a unilateral method within the science should be formalised and academic consensus obtained. The study at hand is indeed an attempt to contribute to such consensus.