

**ENTREPRENEURSHIP EDUCATION AT  
TERTIARY INSTITUTIONS IN RWANDA:  
A SITUATION ANALYSIS**

by

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for the Degree of**



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## **PREAMBLE**

“Research projects and research reports differ from mini-thesis in that they are more limited in scope and rigour. Theses need to be based on a thorough review of the theoretical and empirical literature on the topic, a coherent conceptual framework and an appropriate methodology. Research projects and reports can be based on a limited review of management techniques or descriptive research.” (*UWC, 2005: 115*)



## **ABSTRACT**

This study explores the provision of entrepreneurship education at Higher Education Institutions (HEIs) in Rwanda with special reference to the levels of provision, support mechanisms, course objectives, contents, teaching and assessment methods to ascertain whether they are appropriately developed to prepare students for entrepreneurship as a career option.

In order to investigate the above, a universe constituted of Heads of Departments (HODs) and lecturers was chosen. The analysis comprised 80 HODs and 12 lecturers of entrepreneurship from seven HEIs accredited by the Ministry of Education in Rwanda.

Data were collected using two questionnaires, one destined to HODs depicting the general profile of entrepreneurship education and another addressed to lecturers of entrepreneurship to assess entrepreneurship courses and pedagogies. Data were analysed by the mean of frequency tables, bar charts, and content analysis.

The findings show that entrepreneurship education at HEIs in Rwanda is not appropriately developed to prepare students for entrepreneurship as a career option. The results indicate a low level of entrepreneurship education provision and a weak standing of entrepreneurship courses, which tend to be stand alone courses and are basically skewed towards the departments of management. Moreover, the results reveal that the development of entrepreneurship education at HEIs in Rwanda is hampered by the lack of support mechanisms, the theoretical orientation of entrepreneurship curriculum and the resort to traditional methods of teaching and assessing entrepreneurship classes.

Based on these findings, it is strongly suggested that HEIs in Rwanda should: (1) develop specialized entrepreneurship programmes for all students; (2) receive special funding for entrepreneurship education; (3) integrate experiential learning in the curriculum; and (4) give special consideration to training entrepreneurship educators.

## **DEDICATED**

To the memory of my ever-loving, understanding and supportive late father, Léonidas Gakuba and mother, Vestine Mukarugaba. Their efforts and sacrifices are behind everything achieved. They have and always will be my role-models, source of strength and inspiration.



## DECLARATION

I, the undersigned, hereby declare that ***Entrepreneurship Education at Tertiary Institutions in Rwanda: A Situation Analysis*** is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree. Where appropriate, the resources I have used and quoted have been properly acknowledged and referenced.

Signed:



Richard Niyonkuru

Date: May 2005

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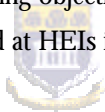
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## ACRONYMS AND ABBREVIATIONS

ESGI	: Higher Institute of Information and Management
et al.	: et alii (i.e. and others)
FTB	: Faculty of Theology of Butare
GEM	: Global Entrepreneurship Monitor
GSN	: Grand seminar of Nyakibanda
HEIs	: Higher Education Institutions
HODs	: Head of Departments
IAMSEA	: African and Mauritius Institute of Statistics and Applied Economics
IntEnt	: Internationalizing Entrepreneurship
ISAE	: Higher Institute of Agriculture and Husbandry
ISCPA	: Catholic Higher Institute of Applied Pedagogy of Nkumba
ISFP	: Higher Institute of Public Finance
ISPG	: Higher Institute of Education of Gitwe
KHI	: Kigali Health Institute
KIE	: Kigali Institute of Education
KIST	: Kigali Institute of Science and Technology
MINECOFIN	: Ministry of Finance and Economic Planning
MINEDUC	: Ministry of Education
MINICOM	: Ministry of Commerce
NGA	: National Governors Association
SMEs	: Small and Medium Enterprises
UAAC	: Adventist University of Central Africa
UCK	: Catholic University of Kabgayi
ULK	: Free University of Kigali
UNATEK	: University of Agriculture, Technology, and Education of Kibungo
UNIDO	: United Nations Industrial Development Organisation
UNILAK	: Laic University of Kigali
UNR	: National University of Rwanda
US\$	: United States Dollar
USA	: United States of American

**LOCATION OF THE SEVEN HIGHER EDUCATION INSTITUTIONS  
SURVEYED FOR THIS STUDY**



**NUR**

**KIST  
KIE  
KHI  
ULK  
UNILAK  
AUCA**

## **KEY WORDS**

Entrepreneurship

Entrepreneurship Education

Tertiary Education

Entrepreneurship Course

Small Business Management Course

Learning styles

Curriculum

Teaching methods

Education about enterprise

Education for enterprise



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## CHAPTER ONE

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### INTRODUCTION TO THE STUDY

#### 1.1 INTRODUCTION

Like most colonized countries, Rwanda inherited its educational system from its former colonial power, which reflected the ideological interest of the colonizers. Nevertheless, it was the Roman Catholic Church that played a significant role in the expansion of the education system, taking on the responsibility of running many schools from primary level upwards.

According to Linguyeneza (2000), the church was interested in developing education because it was then able to influence young people to be baptized. The Ministry of Education asserts that their mission was to evangelize and train the administrators of the colonial power (*MINEDUC*, 2002). Indeed the general development of the country and the development of its human resource base in particular, was not on the agenda of the colonial power. Instead, the education system emphasized the transmission of Christian moral and spirituality but paradoxically also promoted social division (Rutayisire, Kabano and Rubagiza, 2003).

After independence in 1962, despite efforts to reform<sup>1</sup> the education system basically at primary and secondary levels the original conception of the system has not changed. In this regard, Jaya (2003: 29) postulates that: “It was selective, preparing the majority of the population to play their role in a traditional society, and the training and development of an educated elite capable of supervising the rest of the population”. In addition, the education system reinforced ethnic division and it is documented that up to the events of the genocide in 1994, a discriminative quota system was used for entry into schools, which was overtly based on ethnic and regional criteria, rather than on scholastic performance (Obura, 2003). This was applicable from primary to higher education; however, the discussion of primary and secondary education is beyond the scope of this

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<sup>1</sup> The education system went through a series of reforms concerned with increasing access to primary schooling (1977-1983), support to secondary education (1982), assistance for improving the quality of primary and post -primary education and management capacity of each of these education sectors (1986-1991) (Jaya, 2003)



analysis. The analysis of the education system in Rwanda in the context of this study is limited to Higher Education.

### **1.1.1 Higher education in Rwanda**

The first institution of higher education, the diploma-granting Grand Séminaire de Nyakibanda, was established in 1936 by the Roman Catholic Church specifically to train men for priesthood. For most of the next three decades, the Seminary was the only institution of higher education in Rwanda, and students who were not trained for priesthood pursued their higher education in the present Democratic Republic of Congo or Belgium. Higher education was introduced with the preoccupation to train numerous, good quality local personnel - firstly to assist the missionaries and eventually to replace them (Linguyenzeza, 2000).

It was not until 1963 that the situation changed with the founding of the Université Nationale du Rwanda (i.e. the National University of Rwanda-NUR) by the Dominican Fathers. Ever since, the structure of higher education changed considerably with the establishment of private and public Higher Education Institutions. Before the genocide (in April 1994) there were three public institutions (UNR, ISAE, and ISFP) and seven private institutions (FTB, IAMSEA, UAAC, ESGI, ISCPA, GSN, and ISPG)<sup>2</sup>.

Though the expansion of higher education in post-colonial Rwanda is remarkable, it is accepted that it was not appropriate in terms of the production of graduates that are relevant to the country's development needs of the 21<sup>st</sup> century (Karemera, 1998). There is also a general consent that the colonial and post-colonial education system destroyed the self-concept and self-esteem of the Rwandan (Rutayisire, Kabano, and Rubagiza, 2003) and at the same time inhibited the spirit of initiative and self-confidence, the spirit of innovation and creativity of the Rwandan people (MINECOFIN, 2002).

<sup>2</sup> **GSN** : Grand Séminaire de Nyakibanda (1936) ; **UNR**: Université National du Rwanda (1963); **FTB** : Faculté de Théologie de Butare (1969) ; **IAMSEA** : Institut Africain et Mauricien de Statistique et d'Economie Appliquée (1976) ; **UAAC** : Université Adventiste d'Afrique Centrale (1984) ; **ESGI** : Ecole Supérieure de Gestion et d'Information (1985) ; **ISCPA** : Institut Supérieur Catholique de Pédagogie Appliquée de Nkumba (1986) ; **ISFP** : Institut Supérieur des Finances Publiques (1986-87) ; **ISAE**: Institut Supérieur d'Agriculture et de l'Elevage (1988-89) ; **ISPG** : Institut Supérieur de Pédagogie de Gitwe (1993).

The devastating genocide and security instability that followed, caused a complete close down of the infrastructure. All schools ceased to function and the already weak education system collapsed. As the only state university, the UNR was specifically targeted by the massacres and suffered enormous destruction (Obura, 2003).

Since the end of the 1994 genocide, the Government has avowed the importance of the role of education in re-establishing and training the human resources required for economic and social development while promoting peace and tolerance in the Rwandan nation (*MINEDUC*, 1998). The main task assigned to Higher Education Institutions by education authorities is to:

“(i) Offer a high standard of education adapted to the country’s needs; (ii) vary the types of education provided, particularly in technological training programmes; (iii) increase the number of places available in Higher Education Institutions and the attendance rate, taking into account the needs and the capacity of the employment market to absorb new graduates; and (iv) promote applied research in a bid to meet public needs” (*MINEDUC*, 1998: viii).

Due to the widespread recognition that Rwanda must expand and diversify its human resource base, the post genocide period is marked by an explosive growth of Higher Education Institutions. The number of public institutions grew from three to six with the founding of the Kigali Health Institute (KHI) in 1996, the Kigali Institute of Science and Technology (KIST) in 1997, and the Kigali Institute of Education (KIE) in 1999. The number of private institutions dropped from seven before the genocide to six afterward<sup>3</sup>.

The number of students tracked the changes in the number of institutions. In the early 1990’s, the expansion of the system saw public and private enrolment rising to about 5,000 students. In the post genocide, in the early 2000s enrolment more than tripled, reaching nearly 17,000 by 2001-02 (*World Bank*, 2004) and recent statistics indicate that the enrolment at Higher Education Institutions (HEIs) reached 20,393 students in 2003 (*MINECOFIN*, 2004: 51).

According to the World Bank study, the education system is producing approximately 1,700 higher education graduates with 2/3 graduates in social sciences and management

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<sup>3</sup>After the 1994 genocide three private institutions went out of existence- the IAMSEA, the ESGI, and the ISPCA and two new institutions were established-the ULK (Université Libre de Kigali) in 1996 and the UNILAK (Université Laïque de Kigali) in 1997

and it is expected that the output of graduates would approach 3,200 annually if the survival rate of 75% is achieved. In 2000, the unemployment rate among degree holders was estimated at an astonishing 35% in the 25-29 age group (*World Bank*, 2004: 173).

A reasonable concern is how well higher education in Rwanda is preparing degree-holders for entrepreneurship as a career option. To address this concern, this study explores and assesses the appropriateness of the support mechanisms available, the content, teaching and assessment methods of entrepreneurship subjects at Higher Education Institutions. For this purpose, the UNR, KIST, KHI, KIE, ULK, UNILAK, and the UAAC are selected for this study.

## **1.2 BACKGROUND AND CONTEXT OF THE RESEARCH**

Rwanda, which was ravaged by war since 1990, culminating in the genocide in 1994, has now engaged on the route of industrial and economic recovery. Employment and income generation at all levels are considered critical elements for the establishment of a lasting peace and stability in the country (*UNIDO*, 1998:1). From this perspective, the promotion of entrepreneurship and small and medium enterprises (SMEs) has become an unavoidable development strategy (*UNIDO*, 1998; *MINICOM*, 1998; *MINECOFIN*, 2002; 2003).

Studies, fora and seminars held in Kigali after the genocide, with the purpose to assist the Rwandan Government in its endeavours of recovery and capacity building to promote entrepreneurship and Small and Medium Enterprises (SMEs), have identified as expected, one of the well-known constraints in developing countries, namely the financial support to entrepreneurs (*MINICOM*, 1998:41). However, though access to capital constitutes an obstacle to the promotion of SMEs in Rwanda, it cannot be considered as the main problem. With regard to the lack of capital argument, Hisrich and Peters (2002) argue that the major problem with entrepreneurship promotion is not access to capital, but rather 'enterprise spirit' development. The point raised by Hisrich and Peters (2002) is consistent with the justification given by the banking sector in Rwanda with regard to lack of financial support:

“Credit facilities are not offered because there are very few national entrepreneurs who could be qualified as reliable entrepreneurs due to inadequate entrepreneurial skills” (MINICOM, 1998:42).

To address the problem of lack of entrepreneurship skills, a report by the Ministry of Commerce and Industry in Rwanda (MINICOM, 1998:62) recommends, among other things, the development of an enterprise culture to be included in school and university academic programmes as a means to develop a seedbed of potential and capable entrepreneurs in Rwanda.

This recommendation is an acknowledgement that the Rwandan education system is not equipped to promote the necessary skills to develop entrepreneurs. In fact, inherited from the colonial power, the Rwandan education system was not set to equip students with skills that are necessary and useful outside the public services (Nkubito, 1989:6; UNIDO, 1998:5). As a consequence, the Rwandan business environment suffers from a shortage of skilled entrepreneurs capable of promoting organized SMEs.



Government initiatives have been concerned with this issue and have centred its actions towards the social transformation spelled out in the 2020 Vision.

Section 12 of the Rwanda 2020 vision (MINECOFIN, 2002) document states that this vision is focused on:

- “Human resources development and a prosperous knowledge-based economy, through literacy and basic education for all, gender equity, science and technology, professional and managerial training.
- The fast development of entrepreneurship and a modern, competitive private sector, based on a culture of initiative and creativity and centred on a solid class of businessmen and entrepreneurs, geared towards capital formation through the revitalization of industry and service sector”.

Though the development of entrepreneurship and the private sector is clearly identified as one of the six pillars of the 2020 Vision, no emphasis has been put on the provision of entrepreneurship education and training in the Rwandan educational system. Therefore, it is likely that the education provided as well as social expectations of young people will

continue to be focused on a professional career as employees, and to a lesser extent, they will consider the opportunity to start their own businesses. Therefore, the vision of the Rwandan Government to develop entrepreneurship and the private sector cannot be realized, as the education system does not foster entrepreneurship.

The positive relationship between education and business creation has been acknowledged by international literature (Lüthje and Frank, 2002; Charney and Libecap, 2000; Robinson and Sexton, 1994). It is also widely accepted that entrepreneurship can be learnt and that higher education levels are associated with significantly high levels of entrepreneurial activity (*NGA Policy Academy*, 2000). As a matter of fact, the trend in many universities in the USA, Europe, East Asia and Latin America is to develop or expand entrepreneurship programmes and design unique and challenging curricula for entrepreneurship students (Kuratko, 2003:10).

Yet, very few African universities offer specialized programmes in entrepreneurship (Kiggundu, 2002: 254) and Rwanda is not an exception. From the background of this research and limited studies about entrepreneurship in Rwanda, there is consensus that it is important to make entrepreneurship education an integral part of the Rwandan Education System (Kagarama, 2001; *MINICOM*, 1998; Nsabiyumva, 1997).

The main concern of the study is to explore the state of entrepreneurship at Higher Education Institutions in Rwanda and to investigate to what extent the support mechanisms, contents, pedagogies and assessments methods are appropriately developed to inculcate entrepreneurial skills, knowledge and values. As pointed out by Bell (1980: 248) “educationists must be aware of what is available to help plan for tomorrow’s needs”. Therefore, a study that investigates the provision of entrepreneurship education is relevant to understand the phenomenon and to help education stakeholders make more informed decisions.

### 1.3 STATEMENT OF THE PROBLEM

In the aftermath of the 1994 genocide, the country's human resource base was depleted by massive killings and massive movements of population across the country's borders. As a consequence, there was an acute shortage of educated employees in both the public and private sectors.

Determined to overcome the challenges posed by the shortage of qualified human resources in the recovery phase, the Government of Rwanda placed education at the top of its priorities and conferred to higher education "the enormous task of restoring the national socio-economic fabric by striving to train agents of this development" (MINEDUC, 1998: viii). Obviously, the main policy objective with regard to higher education is to increase access and quality of higher and university education. Ten years after the genocide, higher education has developed substantially both in terms of the number of Higher Education Institutions and students' enrolment, as well as the output of graduates. World Bank simulation indicates an output of 3,200 graduates annually at HEI's in Rwanda if a survival rate of 75% is considered (World Bank, 2004).

In view of the current output of graduates, the situation has certainly shifted from one of meeting emergency shortages of qualified workers to one in which a steady flow of school leavers are entering the labour force in search of suitable jobs, raising the question of whether the Rwandan labour market can effectively absorb this volume of output (World Bank, 2004). There are already signs of saturation of the labour market for graduates. In 2000, it was documented that 35% of new degree holders in the 25-29 age group were unemployed. The World Bank study (2004: 161) predicted that "unless job creation keeps pace with the recent explosive growth in higher enrolments, graduate unemployment could easily develop into a major social problem in the coming years".

Considering that two-thirds of students enrolled at higher education in Rwanda are skewed towards social sciences and management - meaning that they have been exposed to business courses at a certain stage of their study - and knowing that about 35% of graduates cannot find jobs, there is ground to question whether the type of education they benefice at university is relevant to prepare them for entrepreneurship as a career choice.

From the background of this study it is noticeable that the Rwandan education system does not foster the entrepreneurial skills, competencies and attitudes necessary to embrace entrepreneurship as a career option. It is apparent that students in Rwanda had received inappropriate education as far as entrepreneurship is concerned. The education system is to be blamed for this problem. Yet, most of the empirical studies reviewed, (Hill, Cinneide and Kiesner, 2003; Lüthje and Frank, 2002; Kuratko, 2003; Charney and Libecap, 2000; Robinson and Sexton, 1994) indicated that entrepreneurship can be taught and that education can enhance entrepreneurial skills, competencies and attitudes. It is time for Higher Education Institutions in Rwanda to develop entrepreneurial graduates by integrating entrepreneurship education in higher education.

#### **1.4 RESEARCH QUESTIONS**

In order to further the study meaningfully, the following questions will be addressed:

- 1.4.1. What are the levels of provision of entrepreneurship education and support mechanisms existing for students at HEIs in Rwanda?
- 1.4.2. What entrepreneurship courses are taught at higher education in Rwanda and what is the focus of these courses in terms of content?
- 1.4.3. How is entrepreneurship taught and assessed at Higher Education Institutions in Rwanda?

#### **1.5 AIM AND SPECIFIC OBJECTIVES OF THE RESEARCH**

In view of the unemployment of graduates with a qualification in business management, the researcher deems it necessary to investigate the provision of entrepreneurship education at Higher Education Institutions in Rwanda and to ascertain whether entrepreneurship education is appropriately developed to prepare students for entrepreneurship as a career option in view of what the literature expects or demands.

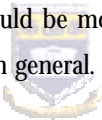
The following are the specific objectives of the study:

- 1.5.1 To identify the level of provision and standing of entrepreneurship courses;

- 1.5.2 To evaluate the support mechanisms available for entrepreneurship education;
- 1.5.3 To identify entrepreneurship courses provided at Higher Education Institutions in Rwanda;
- 1.5.4 To determine the aims, contents, teaching and assessment methods for entrepreneurship courses at Higher Education Institutions;
- 1.5.5 To ascertain whether entrepreneurship education is appropriately developed in terms of levels of provision, support mechanisms, aims, contents, teaching and assessment methods and to make recommendations based on the findings of this study.

## **1.6 SIGNIFICANCE OF THE STUDY**

The study could provide useful insights into the state of entrepreneurship education for a range of role-players in Rwanda. It is one of the first studies of this nature to investigate the provision of entrepreneurship education in Higher Education Institutions in Rwanda. Therefore, findings from this study would be most useful for policy makers, academics, educational institutions and the public in general.



Furthermore, this study could assist in the following situations:

1. Help tertiary institutions understand the shortcomings of current entrepreneurship programmes and raise awareness about developing suitable entrepreneurship programmes to prepare students for entrepreneurship as a career option;
2. Serve as a documented source on entrepreneurship education for curriculum developers in Rwanda, thus it might inform Rwandan educators to integrate curriculum and teaching methods that foster entrepreneurial competencies, skills and attitudes.

## **1.7 ETHICS STATEMENT**

This research project complies with the ethical requirements as stipulated by the University of the Western Cape. The researcher ensured that relevant research methods, accurate data gathering and processing and reporting were achieved. The nature, aims



and importance of the study were explained to respondents and their consent was sought before the collection of data. It was explained that the study is anonymous and voluntary, and that all information obtained was to be confidential. Finally, the data was collected from only those participants whose consent was obtained and who were ready to voluntarily participate in this study.

## **1.8 THE STRUCTURE OF THE RESEARCH**

This study is divided into five chapters, which are structured as follows:

Chapter one covers the introduction and the background to the study. It includes the problem statement as well as the research questions, aims, and objectives. The chapter proceeds with an articulation of the significance of the study. Chapter 1 ends with an expression of ethics and a presentation of the structure of the study.

The review of the literature relating to the topic under research is presented in Chapter 2. This chapter gives a detailed account of the literature germane to entrepreneurship as a teaching subject. It covers the definitions of key concepts, the relevance of entrepreneurship education, and the internationalisation of entrepreneurship education. A comprehensive review of the debate around issues of entrepreneurship education curriculum, namely: aims, contents, teaching and assessment methods are presented.

Chapter three presents the research design underpinning this study. It indicates the research methods, the data collection techniques used, as well as the process of data collection. The choice of a quantitative approach and the use of a questionnaire as a data collection tool for this study are discussed in this chapter.

The research findings are presented in Chapter four. This chapter deals with primary data presentation and analysis. Findings concerned with the general profile of entrepreneurship education at Higher Education Institutions in Rwanda as well as the profile of entrepreneurship curriculum in terms of course aims, contents, teaching and assessments methods are discussed.

Chapter five presents the overview of the research, summarises the research findings and draws conclusions and recommendations.

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## CHAPTER TWO

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### ENTREPRENEURSHIP EDUCATION: A REVIEW OF THE LITERATURE

#### 2.1 INTRODUCTION

This chapter begins with an overview of entrepreneurship education and presents the definition, the relevance and the global trends of entrepreneurship education. Thereafter, a brief review of issues regarding the confusion around the distinction between traditional management education and entrepreneurship education is dealt with. Following the presentation of key features differentiating entrepreneurship education from traditional management education, a comprehensive review on the literature about issues of the entrepreneurship education curriculum is undertaken with the objective of identifying the recommended practices in view of the current research.

Entrepreneurship education is a new field in the academia but has achieved a growing recognition that it can contribute toward the creation of an enterprise culture among learners (Kuratko, 2003; Solomon, Duffy, and Tarabishy, 2002). According to scholars and researchers, there is a good possibility to increase entrepreneurship ability through education (Gorman, Hanlon, and King, 1997; Ronstadt, 1987). Therefore, considerable academic efforts have been focused upon entrepreneurship education in recent years helping the field to develop and to gain momentum. Presently, entrepreneurship is taught at more than 1500 colleges and universities around the world (Menziez, 2003; Charney and Libecap, 2000).

Increased academic research efforts have been concerned with the nature, relevance, content and appropriateness of entrepreneurship education (Leitch and Harrison, 1999). Leitch and Harrison (1999) suggest that “the most difficult and costly research on entrepreneurship education will involve the examination of different programme contents and pedagogical methods used to accomplish educational objectives”.

It appears as if the appropriateness of entrepreneurship education is related to Programme content and pedagogical methods. For this reason, issues of entrepreneurship curriculum are discussed in Chapter 2.

## **2.2 ENTREPRENEURSHIP EDUCATION**

In order to get a meaningful understanding of the term entrepreneurship education as used in this thesis, it is essential to provide an admissible definition of entrepreneurship education. For the same purpose, it is important to highlight the relevance and the current trends in entrepreneurship education.

### **2.2.1 Working definitions**

The great obstacle in studying entrepreneurship has been its definition. Many researchers have solely defined entrepreneurship in terms of who the entrepreneur is and what he does (Shane and Venkataraman, 2000), but still there is little consensus about the definition of entrepreneurship and the entrepreneur (Shane and Venkataraman, 2000; Cunningham and Lischeron, 1991; Bygrave, 1989). Consequently, there is also confusion around the term entrepreneurship education.

#### 2.2.1.1 Entrepreneurship



For the purpose of this research, the definition of Shane and Venkataraman (2000) is adopted. They define entrepreneurship as “a process through which opportunities to create future goods and services are discovered, evaluated and exploited”. They argue that the field of entrepreneurship involves the study of sources of opportunities; the process of discovery, evaluation, and exploitation of opportunities. In this context, the entrepreneur is defined as the individual who discovers, evaluates, and exploits opportunities.

#### 2.2.1.2 Enterprise and entrepreneurship education

In education, the literature has used entrepreneurship, enterprise, and small business education interchangeably (Alberti, Sciascia, and Poli, 2004; Garavan and O’Cinneide, 1994) thus attesting the confusion that surrounds these terms. For example, the term enterprise education is preferred in the United Kingdom and Ireland, while entrepreneurship education is commonly used in the USA and Canada.

Referring to the distinction made by Garavan and O’Cinneide (1994:4), “enterprise education has the objective to develop enterprising people and inculcate an attitude of self-reliance using appropriate learning while entrepreneurship education aims directly at stimulating entrepreneurship which may be defined as independent small business ownership or the development of opportunity seeking-managers within companies”. As for small business education, they aim at increasing the number of people who are knowledgeable about small business as an economic activity to consider it as a career option.

For the purpose of this study, the definition used by Alberti, *et al.* (2004:5) who define entrepreneurship education as “the structured formal conveyance of entrepreneurial competencies, which in turn refer to the concepts, skills and mental awareness used by individuals during the process of starting and developing their growth-oriented ventures” is used. The reference to growth-oriented ventures made in this definition is noteworthy for education and training purposes as it allows for the differentiation of self-employment from entrepreneurship. As mentioned by Garavan and O’Cinneide (1994: 4) “while all entrepreneurs are self-employed, not all self-employed persons are entrepreneurs”.



Moreover, entrepreneurial learning as defined by Alberti, *et al.* (2004) refers to the active and cognitive processes individuals employ as they acquire, retain and use entrepreneurial competencies.

#### 2.2.1.3 Traditional business education versus entrepreneurship education

Various studies have established that there are fundamental differences between the traditional business education and entrepreneurship education (Solomon, *et al.*, 2002). Without elaborating on this issue, the researcher admits the difference between the two approaches as defined by Vesper and McMullan (1998:9). In fact, they mention that traditional business education is concerned with the provision of skills needed to understand the function of an already existing business. Conversely, the main objective of entrepreneurial education is “to generate more quickly a greater variety of different ideas for how to exploit a business opportunity, and the ability to project a more extensive sequence of action for entering business”.

Another comparison worth making, entails contrasting entrepreneurship courses to small business management courses, a comparison not always dealt with in the literature germane to entrepreneurship education (Winslow, Solomon and Tarabishy, 1999; Zeithaml and Rice, 1987).

#### 2.2.1.4 Small business management courses versus entrepreneurship courses

Zeithaml and Rice (1987) assert that the two terms are often used interchangeably in university education and they suggest examining course descriptions in order to determine whether courses are aimed at starting, developing, or selling a business, or at managing an ongoing business; however, they are not the same.

As mentioned by Solomon, *et al.* (2002) a small business management course has traditionally had the “objective of providing students with management know-how associated with managing and operating small, post-start-up companies including setting goals and objectives, leading, planning, organizing, and controlling from a small business perspective”. In contrast, Winslow, Solomon and Tarabishy (1999) declare that entrepreneurship courses emphasize information in which the principle objectives of the entrepreneur are the creation and development of a new venture with an emphasis on profitability and rapid growth and expedient exit strategies.

### 2.2.2 Relevance of entrepreneurship education

Economic growth in all industrialized and developing countries is a key issue and particular interest is being focused on the role of entrepreneurship and small business (Wennekers and Thurik, 1999; Garavan and O’Cinneide, 1994). Garavan and O’Cinneide (1994) advance the explanation that economic recession, high unemployment rates and fluctuations in international trade cycles have contributed to the revival of interest in entrepreneurship as a possible solution to rising unemployment rates and as a recipe for economic prosperity. In the same vein, Wennekers and Thurik (1999) affirm that entrepreneurship is essential for economic growth in modern open economies. The reason being that globalisation and the information and communication Technologies (ICT)-revolution induce an intense demand for entrepreneurship.

Since entrepreneurship can positively affect economic growth and development, governments should attempt to increase the supply of entrepreneurs and initiating entrepreneurship educational programmes is one of the factors that can affect the supply of entrepreneurs (Burnett, 2000). A recent report by the European Commission (*European Commission, 2004*) regards education as an important means to create a more entrepreneurial mindset among young people and they assert that promoting entrepreneurial skills and attitudes provides benefits to society even beyond their application to new business ventures. Alberti, *et al.* (2004) indicate three sources of demand for entrepreneurship, namely governments, students, and the business-world:

- Through education, Government driven by the post-Fordist economy, aim at developing an entrepreneurial culture oriented to job creation. In fact it is documented that most of the new jobs arise from entrepreneurial small firms;
- Young (1997) suggests two sets of reasons for students to study entrepreneurship: firstly, they may want to start up their own businesses; secondly, they may wish to acquire knowledge which will be helpful in their careers in larger organizations;
- The third source concerns both large and small firms. Alberti, *et al.* (2004) point out that, on one hand, there seems to be a general shortage of managerial skills in SMEs and on the other hand, within larger companies there is a need for managers who are oriented to the development of new business initiatives to ensure a continuous renewal.

Given the relevance of entrepreneurship perceived at both the macro level of economic development and at the micro level of personal satisfaction and achievement (Alberti, *et al.*, 2004); and considering the recognition of the possibility to increase entrepreneurship ability through education (Gorman, Hanlon and King, 1997; Ronstadt, 1987), there is an increased interest of developing educational programmes to encourage and foster entrepreneurship within the education system (Solomon, *et al.*, 2002).

### **2.2.3 Entrepreneurship education: A global phenomenon**

From the above discussion, it is noticeable that there is a growing recognition of entrepreneurship as a driving force to economic development and job creation. At the same time, there is a need to support the field. In this regard, academic institutions have been called upon to contribute through education and training (Finkle and Deeds, 2001; Laukkanen, 2000). Therefore, considerable academic efforts have focused upon entrepreneurship education in recent years helping the field to develop and to gain momentum. These efforts have paid off and entrepreneurship is currently taught at more than 1500 colleges and universities around the world (Menzies, 2003; Charney and Libecap, 2000).

#### **2.2.3.1 Entrepreneurship education in North America**

The literature scan reveals that entrepreneurship education has grown and received recognition by many universities and colleges in North America as an academic field (Kuratko, 2003; Menzies, 2003; Charney and Libecap, 2000). It is in the USA that the field has achieved perhaps the greatest growth rate. Entrepreneurship and small business education has exploded to more than 2,200 courses, 277 endowed positions, 44 refereed academic journals, mainstream management journals devoting more issues to entrepreneurship, and over 100 established and funded centres (Kuratko, 2003). This indicates that entrepreneurship education is well catered for in the USA, as far as the educational infrastructure for entrepreneurship is concerned.

In most universities in the USA, entrepreneurship courses are offered at both the undergraduate and graduate levels (Solomon and Fernald, 2003; Dana, 1992) and some of these schools offer four or more courses that lead to concentrations, majors, and degrees in entrepreneurship (Dana, 1992). In terms of course focus, Ray (1992) points out that Anglo-American entrepreneurship training programmes consist of: identifying an opportunity, writing a business plan, raising venture capital, and harvesting the ventures through an initial public offering. As far as financial support is concerned, Katz (2003) points out that the area of entrepreneurship education draws on a larger financial foundation and it outstrips all other areas of business education. For instance, the

endowment to major business schools as institutions have totalled US\$ 975,000,000 since 1984 for which, US\$440,000,000 were endowed to entrepreneurship (Katz, 2003: 292). Similar to the USA, entrepreneurship education at universities in Canada is provided by business schools as well as non-business faculties (especially in their engineering faculty) at both undergraduate and graduate level (Loucks, Menzies and Gasse, 2000).

However, business schools provide the bulk of entrepreneurship education (Menzies, 2003). According to Loucks, *et al.* (2000) every university in Canada offers one or more courses in entrepreneurship and currently all of the comprehensive universities in Canada offer on average, enough courses for a major in entrepreneurship. In terms of course focus, Loucks, *et al.* (2003) found that introductory courses focus on awareness of career option at undergraduate level, while at graduate level the focus is on entrepreneurial behaviour. Opportunity identification and idea generation are also the main themes at undergraduate level. Many courses, oriented towards the start-up process, focus on business planning. However, less emphasis is placed on the theme of new and small venture management, but topics concerned with management consulting and managing risk and uncertainty are growing.



As reported by Menzies (2003) entrepreneurship education in Canada is not well-supported in terms of endowments as compared to the USA: endowed chairs in entrepreneurship are much less common in Canada, the creation and development of entrepreneurship centres as part of university entrepreneurship education is a relatively recent but growing phenomenon, and incubators are not popular at university due to their high cost of operation. However, one of the most interesting developments in entrepreneurship education in Canada has been the growth of ACE (Association of Collegiate Entrepreneurs) clubs at most universities and some colleges. In terms of financial support, entrepreneurship education in Canada seems not to be well funded.

#### 2.2.3.2 Entrepreneurship education in Europe

Compared to the evolution of entrepreneurship education in the USA, interest in entrepreneurship education in Europe is relatively new. However, as pointed out by Dubbini and Iacobucci (2004) this trend is changing and courses about entrepreneurship have grown steadily in all the main countries in Europe. Embedding entrepreneurial



courses in university curricula is advocated by several academic and governmental studies. A recent survey of entrepreneurship education in Europe (Wilson, 2004) reveals that entrepreneurship courses remain primarily electives at European universities at both undergraduate (73% electives) and postgraduate level (69% electives). They also tend to be offered in stand-alone courses, rather than being integrated across the curriculum. Entrepreneurship courses are found to focus on start-ups, business planning, SMEs, family business, business strategy, innovation and the entrepreneurship environment. Concerning support mechanisms, European universities provide a variety of entrepreneurship related activities and services such as coaching for start-ups, business plan writing competitions, student internships and incubation facilities (*Entrenews*, 2004:3). However, contrary to the USA, successful entrepreneurs in Europe rarely give back by funding centres or chairs. Wilson (2004) indicates that the bulk of funding sources of the centres is constituted prominently by governments, foundations and the universities themselves.

#### 2.2.3.3 Entrepreneurship education in developing countries

Research in entrepreneurship education in developing countries is scarce or non-existent. Dubbini and Iacobucci (2004) assert that there are only few studies and research on entrepreneurship education outside the USA. This is an indication of the delay with which entrepreneurship education has developed outside the USA. In the context of African countries, Kiggindu (2002) points out that entrepreneurship research is relatively lacking. This makes it difficult to report the progress of entrepreneurship education in these countries.

Nevertheless, there are some researchers that point out an increased interest in entrepreneurship education among transitional economies of East European and Asian countries (Mitra and Matlay, 2004 and Dana, 2001). Furthermore, there is evidence that entrepreneurship courses are becoming more and more common in undergraduate and Master's curricula. In China for example, where Li, Zhang and Matlay (2003) conducted a survey of 26 top business schools, it was found that six of them offered business venturing programmes and five focused on entrepreneurship modules. In Singapore, at the National University of Singapore (NUS) entrepreneurship courses are complemented by new initiatives like business plan competitions, business incubators for professors and

students embarking on start-ups, regular forums that bring entrepreneurs onto campus, and a venture support fund to seed university spin-offs (Shanmugaratnam, 2004).

Concerning less developed countries, especially in Latin America and Africa, entrepreneurship education has not received such recognition (Postigo and Tamborini, 2002; Kiggundu, 2002). Nonetheless, in Latin America entrepreneurship courses can be found at universities in Colombia, Argentina, Mexico, Honduras, Panama, Costa Rica, Peru and Brazil but little is known about them (Postigo and Tamborini, 2002). Postigo and Tamborini (2002) report on the development of entrepreneurship at universities in Argentina and point out that some of the universities have entrepreneurship courses at the undergraduate or graduate level. They further mention that most of the private institutions have business plan contests, while the public ones have incubators.

Similar to the case of Latin America, little is known about entrepreneurship education in Africa. However, Kiggundu (2002) postulates that very few African universities offer specialized programmes in entrepreneurship and suggests making entrepreneurship an integral part of the African education system. In the same vein, Visser (1997:10) suggests “realigning places of higher learning” in South Africa given the fact that universities have ignored the methodologies of opportunity identification and the spawning of entrepreneurial talent. In all evidence, they call for entrepreneurship education to be integrated into the curriculum at African universities. In other words, they recognize that the education system in Africa is lagging behind in terms of integrating entrepreneurship education into the curricula.

In brief, it is noticeable that entrepreneurship has gained an international recognition as a field in the academia. The growing number of universities and colleges offering entrepreneurship is an acknowledgement of entrepreneurship as a course that can be taught. Solomon, Duffy and Tarabishy (2002) point out that the dilemma is not that demand is high, but that the methods of teaching selected meet the new innovative and creative mindsets of students. Paraphrasing Ronstadt (1987) what should be taught and how it should be taught constitute the relevant question regarding entrepreneurship education. This question invites an analysis of the content and teaching methods suitable for a real entrepreneurship education. It is then essential to discuss issues in an entrepreneurship education curriculum.

## **2.3 ISSUES IN ENTREPRENEURSHIP EDUCATION CURRICULUM**

It is evident that entrepreneurship education is a field of interest for universities and colleges. Therefore, curriculum for entrepreneurship education is being developed, refined and debated. The rationale for developing and refining the curriculum is based on empirical evidence that not only the curricula have concentrated on preparing the students towards the “take-a-job” option instead of the “make-a-job” option (Kourilsky and Walstad, 2000) but also that venture creation is a possible and a desirable option (Brenner, Pringle and Greenhaus, 1991). There is also evidence that the inclination towards entrepreneurship as a career option is associated with several personal characteristics (values and attitudes, personal goals, creativity, risk-taking propensity, and locus of control) that might be expected to be influenced by a formal education programme (Gorman, Hanlon and King, 1997). The challenge for educators is to develop creative curricula that meet the rigours of academia whilst keeping a reality-based focus and entrepreneurial climate in the learning experience environment (Solomon, Duffy and Tarabishy, 2002).



According to Brown (2000), a number of questions concerned with curricular issues are apparent, for example: “How is entrepreneurship education defined? How does it differ from business education or business management training? What are the critical components of entrepreneurial training/education?”

The first two questions have been addressed in section 2.2 of this chapter. The critical component of entrepreneurship education is discussed in the sections below.

### **2.3.1 Key issues in entrepreneurship education**

The big challenge for researchers and educators in relation to entrepreneurship education is the appropriateness of curricula and training programmes (Garavan and O’Cinneide, 1994). Fleming (1999: 405) adds that the main challenge is concerned with “production of graduates who are capable of being innovative and who can recognise and create opportunities, take risks, make decisions, analyse and solve problems, and communicate clearly and effectively”.

From a research perspective, Alberti, *et al.* (2004) identify five main issues in debating how to develop entrepreneurship through education, namely the variety of audiences and objectives, the contents of entrepreneurship courses, pedagogies and assessment methods. However, they mention that the debate around audiences and objectives seems to be closed due to the apparent consensus among scholars, whereas the debate around the contents and pedagogies is still open. These five issues and their relationships are presented below in Figure 2.1.

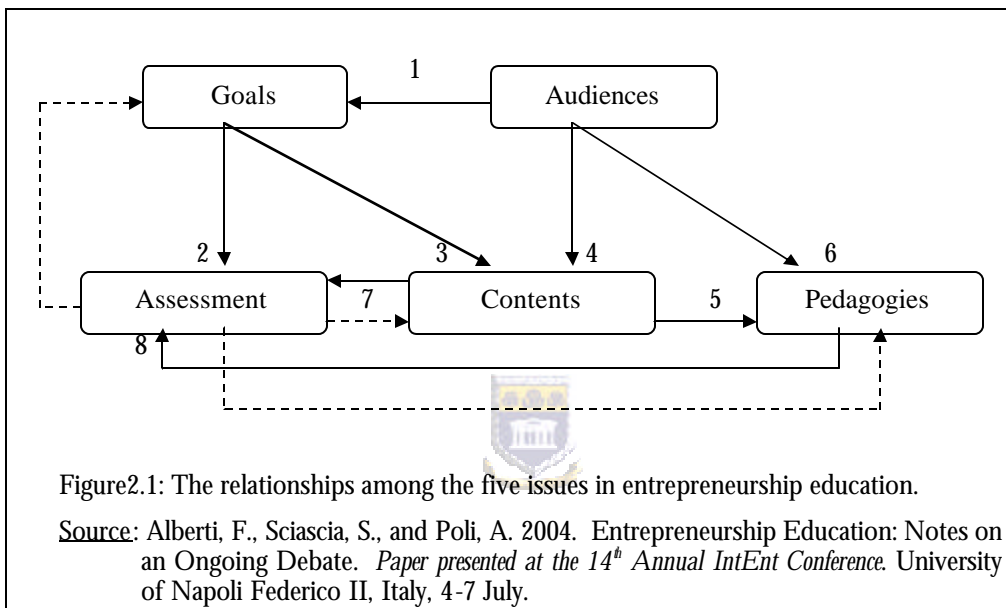


Figure2.1: The relationships among the five issues in entrepreneurship education.

Source: Alberti, F., Sciascia, S., and Poli, A. 2004. *Entrepreneurship Education: Notes on an Ongoing Debate. Paper presented at the 14<sup>th</sup> Annual IntEnt Conference.* University of Napoli Federico II, Italy, 4-7 July.

It is apparent from Figure 2.1 that all of the five issues are related to one another. Alberti, *et al.* (2004) point out that educational goals depend on the learning audience (1); assessment can be done only if the goals are fixed (2); contents can be defined only after goals have been fixed (3); and depending on audience (4); pedagogies can be chosen depending on contents (5) and audiences (6); assessment depends on both contents (7); and pedagogies (8). Alberti, *et al.* (2004) conclude that the five core research issues in entrepreneurship education and their relationship have important implications for the development of an effective learning process.

The research framework of this study borrows from the core issues in entrepreneurship education reported above and only issues related to goals, contents of entrepreneurship courses, teaching and assessment methods are considered, given the nature of this study.

### 2.3.1.1 Aims and objectives of entrepreneurship courses

Entrepreneurship literature provides evidence of the confusion that exists between entrepreneurship courses and traditional management courses (Hills, 1998; Solomon, Duffy and Tarabishy, 2002). Subsequently, many learners have received business management education in the name of entrepreneurship education. Through the identification of various objectives of entrepreneurship courses, this confusion might be avoided. Garavan and O’Cinneide (1994) suggest a range of commonly cited objectives of entrepreneurship education, which include:

- acquiring knowledge relevant to entrepreneurship;
- acquiring skills in the use of techniques, in the analysis of business situations and in the synthesis of action plans;
- identifying and stimulating entrepreneurial drive, talent and skills;
- undoing the risk-adverse bias of many analytical techniques;
- developing empathy and support for the unique aspects of entrepreneurship;
- devising attitudes towards change;
- encouraging new start-ups and entrepreneurial ventures; and
- stimulating the affective socialisation element (Alberti, *et al.*, 2004).

They conclude that the multiplicity of objectives constitutes a significant problem for programme design. Garavan and O’Cinneide (1994) contend that for entrepreneurship education to be effective, it must contain both factual knowledge and practical applications. This implies that some courses should aim at imparting theoretical knowledge while others should aim at building practical skills. This categorisation of entrepreneurship is also mentioned by various authors like Hartshorn (2002), Postigo and Tamborini (2000), Fålkang and Alberti (2000), and Levie (1999). They claim that entrepreneurship courses are divided into two categories:

- courses that aim at preparing learners for entrepreneurship. The objective is educating and training students in the skills they need to develop their own businesses;
- and courses that aim at teaching them about entrepreneurs, entrepreneurship and the importance of small business in the economy and society.

Considering that entrepreneurship education is defined as the structured formal conveyance of entrepreneurial competencies (Alberti, *et al.*, 2004), the research sides with

Garavan and O’Cinneide (1994) and considers that for effective entrepreneurship education, courses should aim at both teaching about entrepreneurship and teaching for entrepreneurship.

#### 2.3.1.2 Contents of entrepreneurship courses

According to Brown (2000) entrepreneurship education should be “viewed in terms of the skills that can be taught and characteristics that can be engendered in students” in order to help them develop new and innovative plans. In this respect Brown mentions that the curriculum has to focus on the features needed to conceive of and start a new business. Alberti, *et al.* (2004) cite four types of knowledge useful for entrepreneurs: (1) business general knowledge, (2) venture general knowledge, (3) opportunity-specific knowledge, and (4) venture-specific knowledge. However, they claim that opportunity-specific knowledge and venture-specific knowledge are the most important for entrepreneurial success. Therefore, programmes in entrepreneurship should foster these last two categories of knowledge.



Kourilsky (1995:13) discusses what contents should be the core of entrepreneurship education and she mentions three attributes that should constitute the content of what she called “the real entrepreneurship education”:

- Opportunity perception and evaluation;
- The marshalling and commitment of resources to pursue the opportunity;
- The creation and operating of business ventures to implement the opportunity-motivated business idea.

Gormon, *et al.* (1997: 4) support the three components of an effective entrepreneurship education by pointing out that “the ability to detect and exploit business opportunities more quickly and the ability to plan in greater detail and project farther in the future” distinguishes entrepreneurship programmes from traditional management programmes. This implies that the contents of courses in entrepreneurship have to address the abilities of identifying an opportunity, pursuing the opportunity and transforming it into a growth-oriented business. It is therefore essential to understand the meaning attached to each component.

Brown (2000) asserts that opportunity recognition involves the identification of unfulfilled desires of the marketplace and creation of ideas for services or products that meet needs at acceptable prices. Opportunity recognition requires observation of the market, insight into customer needs and desires, and invention and adaptation. Marshalling the investment of resources involves a willingness to take risks and invest resources, as well as skills for securing outside investment. The creation of an operating business organisation to deliver the product or services involves development, financing, marketing, and management skills.

The researcher assents to the three components of the curriculum in entrepreneurship education as defined by Kourilsky (1995). He believes that these components, if taken into consideration when developing a curriculum for entrepreneurial education, could contribute to building knowledge, skills and values necessary for new venture creation.

However, the notion of curriculum goes beyond designing the course content. It also includes the delivery approach. As Carl (1995) defines it, the curriculum “is not merely a course of study, nor is it a list of goals or objectives; rather, it encompasses all of the learning experiences that students have under the direction of the school.” The curriculum is thus a broad concept that includes teaching and learning activities. These issues are discussed in the following section:

### 2.3.1.3 Learning process and teaching methods for entrepreneurship education

#### 2.3.1.3.1 *Pedagogies for entrepreneurship education*

In the previous section we addressed the issue of what should be taught. It is also necessary to know how it should be taught. The study of what should be taught (learning content) to entrepreneurship students and how it should be taught (pedagogies) has interested various authors. This follows the call of Sexton and Upton (1988) that entrepreneurship educators do not only advance the knowledge of the content but also examine approaches to improve the mechanics or delivery methods used to teach entrepreneurship.

Diverse researchers have addressed the issues related to pedagogy for entrepreneurship education. Sexton and Upton (1988) suggest that entrepreneurial programmes be designed in such a way to make potential entrepreneurs conscious about the barriers of entering entrepreneurial activities so that in real life they can be able to devise strategies to overcome them. The point is that educators not only have to raise student awareness about entrepreneurship but they also have to involve learners to experience frustration associated with entrepreneurial activities. To accomplish this Sexton and Upton (1984) propose a structure, in which courses emphasise individual activities over group tasks, are relatively unstructured, and present problems that require a novel solution under conditions of ambiguity and risk. In another study, Ussman (1998) proposes that students actively participate in initiatives that force them to be in contact with firms.

Although the debate about effective teaching techniques for entrepreneurship educators is still open among researchers (Alberti, *et al.*, 2004) it appears that providing students with opportunities to practice or to experience entrepreneurship is a critical component of most of entrepreneurial education programmes. Project-based and experiential learning is widely recommended for entrepreneurial education (Solomon, *et al.*, 2002; Sexton and Upton, 1984) and they are believed to foster needed entrepreneurial competencies.

Solomon, *et al.* (2002:71) identify the most common activities involved in teaching entrepreneurship courses in the perspective of an experiential learning. They are synthesised in the Table 2.1 below:



Table 2.1: Most common activities in entrepreneurship teaching	
Activities	Authors
Business plans	Hills (1988); Vesper and McMullan (1988); Preshing (1991), Gartner and Vesper (1994); Gorman et al. (1997)
Students business start-ups	Hills (1988); Truell et al. (1998)
Consultation with practicing entrepreneurs	Klatt (1998), Solomon et al. (1994)
Computer simulation	Brawer (1997)
Behavioural simulation	Stumpfs et al.(1991)
Interviews with entrepreneurs, environmental scans	Solomon, et al. (1994)
“Live” cases	Gartner and Vesper (1994)
Field trips, use of videos and films	Klatt (1988)
Student entrepreneurship clubs	Vesper and Gartner(1994)

Source: Adapted from Solomon, G.; Duffy, S. and Tarabishy, A, 2002. The state of entrepreneurship education in the United States: A nation wide survey and analysis. *International journal of entrepreneurship education*, page 71.

The above-mentioned teaching techniques encourage the development and practice of entrepreneurial skills and are opposed to the traditional techniques, which leave less room for student participation in real enterprise activities. Traditional education methods were criticised for their emphasised values and abilities, which were inimical to an entrepreneurial spirit and it was even suggested that using traditional education methods to develop entrepreneurs could be interpreted as teaching to drive using the rear mirror (Garavan and O’Cinneide, 1994). Traditional education methods refer to methods using formal lectures and case studies (Cooper, *et al.*, 2004).

### 2.3.1.3.2 Learning process in entrepreneurship education

Garavan and O’Cinneide (1994:10) discuss the most appropriate learning process and pedagogies for transferring entrepreneurial skills and knowledge. They mention that the entrepreneur, like any other learner needs to employ different learning styles – concrete experience, reflective observation, abstract conceptualisation and active experimentation.

In order to depict the learning style preference of an entrepreneur, they refer to the grid of learning styles and pedagogical techniques presented in Table 2.2.

Garavan and O’Cinneide (1994) contend that, on the active experimentation/reflective observation dimension, entrepreneurial behaviour indicates a primary preference for action. Thus, an entrepreneur is expected to favour active experimentation rather than reflective observation.

On the abstract conceptualisation/concrete experience dimension, they assert that the entrepreneur, as a creative person, prefers concrete experience. They argue that to be creative, one must be free of the constraining focus of abstract concepts in order to experience anew.

As this, Garavan and O’Cinneide (1994:10) find that “the pedagogical methods which are best suited to an entrepreneurial learning style are those presented in quadrants III and IV of the learning grid”. In other words, active pedagogical methods are best indicated for entrepreneurship education over reflective or passive methods. However, they do agree that a typical entrepreneurial situation would require the rise of all four learning abilities. It means that they do not favour one learning style over others; neither do they affirm one best pedagogical approach for all programmes.

Table 2.2: Conceptual Grid of Learning Styles and Pedagogical Techniques

<b><u>Concrete experience</u></b>	
<p>III. <i>Active-applied</i></p> <p>Changes in skills and attitudes</p> <p>Role-plays</p> <p>Management simulation</p> <p>Processing discussion</p> <p>T-groups/encounter groups</p> <p>Learning diaries</p> <p>Field projects</p> <p>Management of learning groups</p> <p>Counselling</p>	<p>II. <i>Reflective-applied</i></p> <p>Changes in application</p> <p>Motives</p> <p>Applied lectures</p> <p>Limited discussion</p> <p>Cases</p> <p>Role plays</p> <p>Problem-oriented exams</p> <p>Programmed instruction with emphasis on skills</p>
<b><u>Active experimentation</u></b>	
<p>IV. <i>Active-theoretical</i></p> <p>Changes in understanding</p> <p>Focused learning groups</p> <p>Argumentative discussion</p> <p>Experiments/research</p> <p>Suggested readings</p> <p>Analysis papers</p> <p>Workshops</p> <p>Monitoring</p> <p>Coaching</p>	<p>I. <i>Reflective-theoretical</i></p> <p>Change in knowledge</p> <p>Theory lectures</p> <p>Required readings</p> <p>Handouts</p> <p>Programmed instruction with emphasis on concepts</p> <p>Theory papers</p> <p>Content-oriented exams</p>
<b><u>Abstract conceptualisation</u></b>	
<p>Source: Garavan, T.N. and O’Cinneide, B. 1994. Entrepreneurship education and Training Programmes: A review and evaluation-Part 1. <i>Journal of European Industrial Training</i>, 18(8): 3-12</p>	

Siding with Garavan and O’Cinneide (1994), Fiet (2001) advocates a combination of deductive and inductive learning styles. Deductive learning is traditional lectures based on the theory, and is thus consistent with passive (Hammer, 2000) or reflective (Garavan and O’Cinneide, 1994) learning. Inductive learning, on the other hand, is concerned with

practical application. Fiet (2001) points out that a course that only consists of theory would be an arid wasteland where only the most intellectually curious students would succeed; a course consisting only of practical applications provides the teacher with no basis for assisting to act on the basis of their choices. The challenge for educators is thus to meet the rigours of academia while keeping a practice-based focus and entrepreneurial climate in the learning experience environment (Solomon, *et al.*, 2002).

#### 2.3.1.4 The assessment of entrepreneurship courses

Alberti, *et al.* (2004) assert that the main problem related to the assessment of entrepreneurship education may lie in measuring output from the entrepreneurial education process. They further claim that there are no standardized methods for assessing the results of entrepreneurship education programmes towards individuals and toward society. Falkang and Alberti (2000: 103-104) declare that some of the reasons for the lack of generally accepted measures are:

- The variety of target groups;
- The university/school philosophy that are contrary to entrepreneurship education/training focus;
- The multiplicity of entrepreneurship education objectives;
- Levels of analysis (society level, firm level, and individual level);
- Time dimension (short-term output and long-term output)

The researcher does not intend to elaborate on these factors given the focus of this section, which is concerned with the assessment of entrepreneurship courses. Therefore, the discussion borrows from the process model of entrepreneurship education developed by the University of Limerick in Ireland. In this model, Hynes (1996) and Fleming (1999) emphasize that outputs of entrepreneurship education can be assessed on a tangible and intangible basis. Tangible outputs are viewed under assignments, presentations, reports, drawings, prototypes, products, and exhibitions. An intangible effect is viewed in terms of goal, achievements, skills/knowledge, confidence, decision-making, problem solving, and communications.

Following this process model, Hynes (1996) points out that the following assessment techniques are used at the University of Limerick: examination of set reading/lecturing

material; project proposal submission, involving the formation of teams; team project; project presentation and discussion; exhibition presentation. He suggests that the combination of the above assessments techniques allows testing and evaluation of various learning instruments used.

Cooper, Bottomley, and Gordon, (2004) of the University of Strathclyde report similar techniques in their entrepreneurship programmes. They indicate that group project accounts for 50% of the module mark, of which 35% is awarded for the project itself and 15% for the formal presentation. Students are also required to complete a number of individual assignments that include reflective learning summaries and company profile of the host entrepreneur and his company. These two examples seem to support the view of Gibb (2002), which affirms that evaluation and assessment of entrepreneurship education appears to occur via projects, and also relying on classroom assessment.

Despite the lack of accepted assessment measures in entrepreneurship education, it is taken for granted that traditional methods (which are examination-based) of assessment alone are not very effective in the measurement of individual learning in entrepreneurship (Cooper, Bottomley, and Gordon, 2004). They suggest adopting an innovative approach that would encourage students to explore their experience, reflect on the learning they have achieved, in terms of both knowledge and understanding, and, importantly, on the skills they have developed.

## 2.4 SUMMARY

It is widely apparent through the literature survey done here that there is an increasing interest in the development of educational programmes to encourage and foster entrepreneurship. The great challenge for researchers has been to identify what makes an entrepreneur and how these characteristics can best be imparted through education. In this respect we have discussed the content of entrepreneurship courses and the delivery process of these courses. As far as the course content is concerned, various researchers point out little uniformity. However, for the entrepreneurial success of learners, there is recognition that the contents of entrepreneurship courses should emphasize opportunity recognition knowledge, marshalling of resources to pursue the opportunity and the creation and management of a viable business.

As for the teaching/learning process it is suggested that traditional methods of teaching entrepreneurship give way to new methods that balance lecture-based classes with active experimentation (active and hands-on pedagogies). This requires a shift in the role of teachers, from instructor to tutor thus an instructor becoming a learning process facilitator (Alberti, *et al*, 2004). With regard to assessment techniques, it is accepted that classroom-based examinations are not effective assessment techniques for entrepreneurship courses.

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## CHAPTER THREE

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### RESEARCH DESIGN AND METHODS

#### 3.1 INTRODUCTION

This study is concerned with the investigation of entrepreneurship education at Higher Education Institutions (HEIs) in Rwanda. The main purpose is to ascertain whether entrepreneurship education is appropriately developed to prepare students for a career option. To successfully complete this project, requires indicating in detail how the researcher investigated the appropriateness of entrepreneurship education. Therefore, this chapter is concerned with the research design and methods. It presents the process followed and the tools utilised to gather and analyse the information needed in the context of this study.

#### 3.2 RESEARCH DESIGN

According to Ogunniyi (1992), research design presupposes the kind of methods to be used and the type of instruments developed to collect appropriate data. Therefore, a research design provides the conceptual framework for the procedures used in collecting data. In the view of Cooper and Emory (1995), the design provides answers for questions such as: What techniques will be used to gather data? What kind of sampling will be used? How will time and cost constraints be dealt with? The research design, therefore, specifies the methods and procedures for the collection, measurement, and analysis of data.

##### 3.2.1 Research approach

Generally, there are different approaches that have to be considered in designing a research. However, as claimed by Hussey and Hussey (1997), the most common are quantitative and qualitative. They do, however, point out that the use of triangulation, which means the use of both approaches in the same study is also a possible research approach.

However, Hussey and Hussey (1997) point out that the choice of a particular approach is determined partly by the nature of the research problem, and is also shaped by one's assumptions. Paraphrasing Willington (2000: 25), selecting a research design rests on the nature of the phenomenon that is being studied.

This study is concerned with determining the level of provision of entrepreneurship education, the support mechanisms to entrepreneurship education, entrepreneurship course aims and contents, the teaching and assessment methods provided at HEIs in Rwanda and thereafter, ascertaining whether they are appropriately developed for entrepreneurship education in view of what is recommended in the literature. The key concepts underlying this study, namely entrepreneurship course aims and content, teaching methods and assessment techniques emanate from discussions by Alberti, Sciascia and Poli (2004) on current debates around curricula and pedagogies for entrepreneurship education. In the context of entrepreneurship education in Rwanda, the researcher defines the questions to be addressed in this study as follows:

- What are the levels of provision of entrepreneurship education and the support mechanisms for entrepreneurship at HEIs in Rwanda?
- What entrepreneurship courses are taught at higher education in Rwanda and what is the focus of these courses in terms of content?
- How is entrepreneurship taught and assessed at Higher Education Institutions in Rwanda?

Considering the nature of the above research questions, a quantitative approach was used to address these questions. As pointed out by Bless and Higson (2000:38) an important advantage of numbers is that they can be analysed by means of descriptive and inferential statistics. They further cite that quantitative research uses methods that provide factual and reliable data that can usually be generalized to a large group at the end of the research.

Although the quantitative approach is privileged in this study, the researcher acknowledges that it has its own weaknesses that are applicable to the current research. For instance Bless and Higson (2000) indicate that quantitative research methods are criticized for their reductionist nature in that they consider only a limited number of



factors, which can lead to an incomplete description of social reality. Other criticisms are specified by Hussey and Hussey (1997:53) in the following terms:

- A highly structured research design imposes certain constraints on the results and may ignore more relevant and interesting findings;
- Researchers are not objective, but part of what they observe. They bring their own interests and values to the research;
- It is impossible to treat people as being separate from their social contexts and they cannot be understood without examining the perceptions they have on their own activities.

### **3.2.2 Strategy of research**

Considering the purpose of this study and the research questions to be addressed, this study can be categorized as a descriptive research. According to Hussey and Hussey (1997) a descriptive research describes phenomena, as they exist. It is used to identify and obtain information on the characteristics of a particular problem or issue. They further mention that descriptive research is undertaken to ascertain and describe the characteristics of the pertinent issues.



The specific method of data collection and analysis used for the purpose of this study are discussed in detail in the section below.

## **3.3 METHODS**

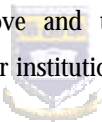
In the process of collecting data for a research, Hussey and Hussey (1997: 64) indicate that the first and most critical stage is to identify the sample and ensure that the sample is unbiased and representative. Thereafter, it is necessary to decide how the questions will be approached.

### **3.3.1 Selecting the sample**

This study was concerned with investigating the appropriateness of entrepreneurship education at HEIs in Rwanda. The main purpose was to identify the level of provision and ascertain the appropriateness of support mechanisms, course curricula and pedagogies *vis-à-vis* preparation of students for entrepreneurship careers. Considering the

nature of research questions of this study, it was necessary to identify respondents who could provide accurate information about the questions asked. It was accepted that Heads of Departments (HODs) within HEIs were the appropriate persons to satisfy the need of this investigation. For the purpose of this study, the HEIs considered, were defined as institutions of higher learning running a 4-year degree and which have enrolled students up to their 4<sup>th</sup> year of study.

Currently there are 12 accredited HEIs in Rwanda, of which six are private institutions, namely: Université Libre de Kigali (ULK), Université Laïque de Kigali (UNILAK), Université Adventiste d' Afrique Centrale (UAAC), Université Catholique de Kabgayi (UCK), Institut Supérieur Pédagogique de Gitwe (ISPG), Université d' Agriculture, Technologie et Education de Kibungo (UNATEK). Among the 12 accredited HEIs, eight of them were created after the 1994 genocide in Rwanda. This means that the majority of HEIs in Rwanda are still young and some of them have not yet enrolled students up to the fourth year of study. These are institutions that were created after the year 2000. Thus, only seven HEIs were identified because they fitted the criteria indicated in the definition cited above and they comprised 80 departments. The breakdown of departments surveyed per institution is indicated in Table 3.1.



Name of Institutions	Departments	Percentage
1. National University of Rwanda (NUR)	28	35.00
2. Kigali Institute of Science and Technology (KIST)	11	13.75
3. Kigali Institute of Education (KIE)	23	28.75
4. Kigali Health Institute (KHI)	9	11.25
5. Université Libre de Kigali (ULK)	3	3.75
6. Adventist University of Central Africa (AUCA)	3	3.75
7. Université Laïque de Kigali (UNILAK)	3	3.75
<b>Total</b>	<b>80</b>	<b>100.0</b>

All HODs from the 80 departments identified in this study were contacted. Given the small size of the universe, the research has opted for a census, and therefore surveyed all 80 HODs. Generally, the basic idea of sampling is that by selecting some of the elements in a population, one may come to certain conclusions about the entire population. However, there are instances where sampling is not necessary. Hussey and Hussey (1997) point out that it is normal to collect data about each member of the population when the total population is small. In the same vein, Leedy (1993) proposes some guidelines for

sample size and mentions that for a population under 100 in a descriptive research, there is no need to sample.

The size of our universe, i.e. 80 HODs suggests that a census is feasible. Another reason that justifies a census in the context of this study is the diversity of programmes offered at the seven HEIs. Some specialise in education, others in health, and even technology. The use of a census is supported by the following statement by Cooper and Schindler (2003:181):

“Two conditions are appropriate for a census study: A census is (1) feasible when the population is small and (2) necessary when the elements are quite different from each other. When a population is small and variable, any sample we draw may not be representative of the population from which it is drawn. The data-gathering instrument used for collecting data is a questionnaire and is explained below.

### **3.3.2 The questionnaire**

Data can be collected by means of personal interviews, telephone interviews, and self-administered questionnaires (Cooper and Schindler, 2003). For the purpose of this study, a self-administered questionnaire is utilised for the advantages it offers compared to interviews.

According to Bell (1987) a questionnaire is a quick and inexpensive process to obtain a vast amount of information covering a large area within a relatively short time. A questionnaire tends to be more reliable because:

- it guarantees confidentiality;
- it helps to avoid fear and embarrassment, which may result from direct contact;
- it allows respondents to be free to answer in their own time and at their own pace; and;
- it enables the researcher to collect large quantities of data from a considerable number of people over a relatively short period of time.

The most common ways of distributing these questionnaires are through the use of mail, fax, and the Internet. They can also be distributed in person.

Given the fact that the researcher had to collect data within a period of one month (data were collected during holidays between June-July, 2004) and that he aimed at surveying all departments and all lecturers in entrepreneurship, the use of self-administered questionnaires was appropriate.

The questionnaires were personally distributed by the researcher. It was possible for the researcher to distribute, and collect questionnaires from heads of departments because all departments within a single institution were situated on the same campus.

In order to understand the provision of entrepreneurship education at Higher Education institutions in Rwanda in terms of level of provision, support mechanism available, courses offered, and the teaching and assessment methods used to deliver these courses, and thereafter, ascertain whether they are appropriately developed for entrepreneurship education at HEIs, a survey questionnaire used by Levie and Wendy (2003) to investigate entrepreneurship education at higher education in the Wales was adapted and administered to all heads of departments and lecturers in entrepreneurship in Rwanda.

Generally the quality of an educational programme can best be assessed by the quality of its graduates (Robinson and Haynes, 1991:42). This is a direct assessment and is beyond the scope of this study. However, they propose an indirect evaluation by examining the resources and support available to the programme. This study used an indirect evaluation and the questionnaire included item related to:

- (1) The level of provision of entrepreneurship education (diploma, certificate, course: compulsory or elective);
- (2) Support activities available for entrepreneurship education;
- (3) Course contents and objectives;
- (4) Teaching and Assessment methods;
- (5) Experience of lecturers.

The questionnaire included only closed-ended questions. A question is described as closed-ended if the respondent's answer is selected from a number of predetermined alternatives. Closed-ended questions are very convenient for collecting factual data and are usually easy to analyse since the range of potential answers is limited (Hussey and Hussey, 1997). However, closed-ended questions can be criticised for they do not

provide the opportunity to the respondents to give their opinions as precisely as possible in their own words.

### 3.3.3 Procedures

The first step in the process of collecting data was to acquire a list of all departments in each single higher education institution and then after to administer questionnaires to HODs. The researcher personally delivered the questionnaires. Eighty questionnaires were distributed to HODs of which 75 were collected. Five questionnaires could not be collected, either because the HODs were not reachable during the timeframe of the survey or because they were not willing to participate. Of the 75 the questionnaires collected, one was not usable. Table 3.2 synthesizes the proportion of distributed and returned questionnaires.

	Actual number	Percentages
Number of distributed questionnaires	80	100%
Number of questionnaires returned	75	93.75%
Number of unusable questionnaires	1	1.25%
Number of usable questionnaires	74	92.5%

In terms of the universe, the researcher achieved a high rate of returned questionnaires, i.e. 93.75%. However, this rate can be justified by the data collection technique used. It is generally accepted that questionnaires delivered directly to the respondents will grant a higher return rate compared to other techniques such as the mail questionnaires, online questionnaires, etc. (Saunders, Lewis and Thornhill, 1997; Oppenheim, 1992).

The next step consisted of administering the questionnaire to entrepreneurship/small business management lecturers. Lecturers were identified from the first questionnaire, from which HODs were requested to provide contact details of entrepreneurship/small business management lecturers in case it was found that the department provide only an entrepreneurship course. Six universities among the seven surveyed had at least one department offering an entrepreneurship course as presented in Table 3.3.

Institutions	Management/ Business studies Department	Number of lecturers	Non business departments	Number of lecturers	Total
1. NUR	Management	4	Agriculture	1	5
2. KIST	Entrepreneurship	2	All (5 Depart.) <sup>1</sup>	-	2
3. KIE	Business studies	1	Computer Science <sup>2</sup>	-	1
4. ULK	Management	1	Social Sciences	1 <sup>3</sup>	1
5. AUCA	Business Administration	1	-	-	1
6. UNILAK	Management	2	-	-	2
Total		11	-	1	12

<sup>1</sup>At Kigali Institute of Science and Technology, the course named “Entrepreneurship development” is a service course to other departments and is compulsory to all students in their third year. It applies also to all 5 departments of the Faculty of Technology.  
<sup>2</sup>The Kigali Institute of Education offers a module named “Entrepreneurship” in 3<sup>rd</sup> year in the Department of Computer Science. However the department is still new and has no students in 3<sup>rd</sup> year  
<sup>3</sup>The same lecturer teach entrepreneurship at both the management department and the social sciences department

In all, 12 lecturers were identified and they all responded to the questionnaires. As in the case of HODs, the researcher personally administered the questionnaire. In both steps, HODs and lecturers were required to fill in the questionnaire immediately, which was then returned to the researcher.



### 3.3.4 Data analysis

Data collected were of quantitative nature. Quantitative data were analysed by including calculation of frequencies of responses obtained from the questionnaires. Frequency analyses were performed to determine the level of provision of entrepreneurship education, the support mechanisms available, course objectives, content, teaching and assessment methods.

Quantitative data were also analysed based on documents indicating the course description in terms of contents and objectives for each entrepreneurship course taught at HEIs in Rwanda. The course descriptions were collected from lecturers for each course taught. Content analysis was performed by recording the raw data from the documents and by determining categories of content based on concepts or similar features frequently appearing in the course description (see Appendix 4). The analysis focused on the manifest content, that is the “the straight and obvious, the visible content of the document” (Sarantakos, 2002:280). Content analysis was performed to get an in-

depth understanding of quantitative data about the aims and content of entrepreneurship/small business management courses.

### **3.4 SUMMARY**

The underlying theme of this study is to ascertain the appropriateness of support mechanisms, course objectives, contents, teaching and assessment methods for entrepreneurship education at HEIs in Rwanda. In order to address the research questions of this study, the researcher utilized a descriptive research design, in the perspective of a quantitative approach.

In the process of selecting the universe for the research, 80 departments were identified within seven Higher Education Institutions. Given the small number of this universe, a census was used; thus all 80 Head of Departments were surveyed. This implies that no sampling technique was utilised to select respondents. To achieve the objectives of this study a self-administered questionnaire with closed-ended questions was utilized as a data collection tool. The questionnaires were personally distributed and collected from heads of departments. This strategy ensured a high rate of returned questionnaires of 93.75%.

From the questionnaire collected from heads of departments, twelve lecturers for entrepreneurship/small business management courses were identified. The researcher personally distributed and collected the questionnaire designed for lecturers. A 100% return rate was achieved as all the twelve lecturers completed and returned the questionnaire.

The data were presented and analysed by the means of frequency tables, bar charts, and content analysis. The presentation and analysis of the data follow in chapter Four.

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## CHAPTER FOUR

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### STATE OF ENTREPRENEURSHIP EDUCATION AT HIGHER EDUCATION INSTITUTIONS IN RWANDA

#### 4.1 INTRODUCTION

This chapter presents and discusses findings of a survey conducted at seven institutions of higher learning in Rwanda comprising 80 departments. Data were collected by means of two types of questionnaires, one addressed to Heads of Departments (HODs) and depicting the profile of entrepreneurship education and another one addressed to entrepreneurship lecturers to assess entrepreneurship courses (See Appendices 2 and 3).

As indicated in Chapter 3, 80 questionnaires were administered to HODs and 75 of them were returned, which indicates that the researcher has achieved a high rate of returned questionnaires (93.75%). However, one questionnaire was not usable; thus the results presented here are based on the responses from 74 respondents heads of departments.

The other category of respondents was constituted of entrepreneurship lecturers at HEIs in Rwanda. Twelve lecturers were identified and they all responded to the questionnaire. The questionnaire addressed to lecturers included questions related to course aims, contents, teaching methods, and assessment of students. In addition to the questionnaire, lecturers were requested to provide a course description indicating the aims, objectives, and content of the course they were teaching.

This chapter is concerned with the presentation and analysis of findings and is divided into three parts. The first part presents the profile of formal entrepreneurship education at HEIs in Rwanda and identifies the level of provision of entrepreneurship education, the standing of entrepreneurship courses and the support mechanisms available at HEIs. The second part covers the analysis of course aims, contents, teaching and assessment methods. The last part consists of a summary of the main findings discussed in this chapter.



## 4.2 DATA PRESENTATION AND ANALYSIS

The main goal of this study is to investigate entrepreneurship education at HEIs in Rwanda and to ascertain whether entrepreneurship education is appropriately developed to prepare students for entrepreneurship as a career option. For the purpose of this study, two categories of respondents were targeted: Heads of Departments (HODs) and lecturers that present entrepreneurship/small business management courses. Based on the information acquired from the questionnaire the following presentations and discussions of results are made.

### 4.2.1 Profile of respondents

Table 4.1 shows the number of respondents classified by gender and function.

Heads of Departments (HODs)			Lecturers		
Male	Female	Total	Male	Female	Total
71	3	74	8	4	12

Out of the 86 respondents, both HODs and lecturers, there are only 5 females. Among the five females, three are HODs and two are entrepreneurship lecturers. The low rate of female respondents can be explained by the fact that traditionally girls' education was viewed as less important than boys. Table 4.2 indicates that 67% of entrepreneurship lecturers (8 lecturers) are teaching on a full-time basis. However, only a few of them have benefited from entrepreneurship training courses/seminars (41.7%) and in general entrepreneurship lecturers at tertiary institutions in Rwanda have less business and entrepreneurial experience. Only three respondents (25% of all lecturers) are found to have set up a small business or were managers of a new or young business.

	Yes	No
Full-time lecturer	67%	-
Part-time lecturer	33%	-
Has set up own business	25%	75%
Was/is a manager in new/young business	25%	75%
Was/is a manager in small business	0%	100%
Was/is a manager in medium sized or large business	16.3%	83.3%
Was/is a manager in the public sector	8.3%	91.7%
Was/is a manager in an enterprise support organization	16.7%	83.3%
Have you attended any entrepreneurship teacher-training course or seminar?	41.7%	58.3%

#### 4.2.2 Profile of formal entrepreneurship education at HEIs in Rwanda

This section aims to identify the profile of formal entrepreneurship education. Formal education in this context refers to a learning process, which occurs in a structured education system like school, universities, etc. in contrast to education that takes place outside of the formally organized school. The question to be addressed here is concerned with the identification of the level of provision of entrepreneurship education, the standing of entrepreneurship courses and the support mechanisms available for entrepreneurship education at HEIs in Rwanda

##### 4.2.2.1 Level of provision of and standing of entrepreneurship courses at HEIs

Table 4.3 indicates that out of 74 departments, none offers a degree or a diploma. The highest level of provision of entrepreneurship education (29.7%) is reported where entrepreneurship is covered in one or more existing courses, which do not focus on entrepreneurship as their primary aim. Only 12.2% of departments offer a course totally dedicated to entrepreneurship and/or small business management.



Table 4.3: Levels of provision of entrepreneurship education at HEIs in Rwanda- Responses from HODs (N=74)

	Yes		No	
	n	%	n	%
We offer an undergraduate degree in entrepreneurship	0	0	74	100
We offer a Diploma in entrepreneurship	0	0	74	100
We offer a certificate in entrepreneurship	1	1.4	73	98.6
We offer occasional seminars in entrepreneurship	10	13.5	64	86.5
Entrepreneurship is covered in one or more existing courses	22	29.7	52	70.3
Entrepreneurship is taught in one or more dedicated courses	9	12.2	65	87.8

The results presented in Table 4.4 indicate also that most of the institutions offering entrepreneurship at HEIs in Rwanda provide entrepreneurship subjects as stand alone courses. In fact, 6 departments of 9 that provide dedicated entrepreneurship courses offer a single course in entrepreneurship. Only 2 departments, the departments of management at the National University of Rwanda (NUR) and the management

department of the Université Laïque de Kigali (UNILAK<sup>4</sup>) offer a set of 4 courses, but all the 4 courses are available for 3<sup>rd</sup> year students only.

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Table 4.4: Number of entrepreneurship courses offered per department			
Institutions	Departments/Faculty/Schools	Class level	Number of courses
NUR	Management	3 <sup>rd</sup> Year	4
	Agriculture	3 <sup>rd</sup> Year	1
UNILAK	Management	3 <sup>rd</sup> Year	4
KIST	Entrepreneurship (Service Department)	3 <sup>rd</sup> Year	1
KIE	Business Studies	2 <sup>nd</sup> &3 <sup>rd</sup>	2
	Computer Science	3 <sup>rd</sup> Year	1
ULK	Management	3 <sup>rd</sup> Year	1
	Social Sciences	3 <sup>rd</sup> Year	1
AUCA	Business Administration	3 <sup>rd</sup> Year	1
Number of modules/electives at HEIs			16

## Discussion

It is believed that an entrepreneurial education will produce more and better entrepreneurs than were produced in the past (Ronstadt, 1985). GEM findings (GEM, 2002) showed, on the one hand a strong relationship between the level of education of an individual and the tendency to pursue entrepreneurial activities, and on the other hand, a strong positive relationship exists between the level of education of the entrepreneur and level of business success. Based on these findings, it was necessary to identify the level of provision of entrepreneurship education at HEIs in Rwanda.

It is evident from Table 4.3 that the highest level of provision of entrepreneurship education is limited to entrepreneurship covered within existing courses (29.7%), and rarely as dedicated courses (12.2%). In other words, the results of this study indicate that only 12.2% of departments at HEIs in Rwanda offer one or more full courses in entrepreneurship/small business management. Furthermore, it is also apparent that even among the small proportion of departments that do offer entrepreneurship courses none is developed to provide a diploma or a degree in entrepreneurship and most of the courses (6 out of 9) are offered by Management/Business departments.

<sup>4</sup> Both universities have similar Programmes in the department of management. UNILAK being a young private institution has fully adopted the Programmes of the NUR, which is the oldest public university in Rwanda.

The results of a recent survey (2002/2003) of entrepreneurship education at tertiary institutions in Wales (Levie and Wendy, 2003), reflect that 82% of the institutions offered entrepreneurship within existing courses, 71% offered dedicated courses, and 18% of the sample of surveyed institutions offered degrees in entrepreneurship while 15% offered a diploma or certificate as their highest level of entrepreneurship education. Therefore, compared to Wales, HEIs in Rwanda present a low profile of entrepreneurship education provision. The higher rates of entrepreneurship education provision at tertiary institutions in Wales can probably be explained by the fact that, entrepreneurship as a discipline emerged earlier in Wales as opposed to Rwanda.

Another comment relates to the standing of entrepreneurship. From Table 4.4 it is evident that only nine out of the 74 departments surveyed, offer a dedicated course in entrepreneurship and six of them offer a single course, either in entrepreneurship or small business management. The high rate of entrepreneurship courses that are taught as single courses is also documented in a survey of entrepreneurship education at European universities and business schools (Wilson, 2004). As commented by Ronstadt (1985), the provision of a single course in entrepreneurship will have less impact on the student propensity toward entrepreneurship.



#### 4.2.2.2 Support activities available for entrepreneurship education

Generally, entrepreneurship education refers to programmes that promote entrepreneurship awareness as a career option and provide skill training for business creation and development (Béchar and Toulouse, 1998). Therefore, educational institutions are expected to provide an entrepreneurial environment that can encourage and facilitate entrepreneurship awareness and experience. From this perspective, Heads of Departments were asked to specify what support activities and mechanisms to entrepreneurship were available in their institutions. The results are presented and discussed along two main points:

- Mechanism for awareness raising; and
- Mechanisms that facilitate experiencing entrepreneurship

4.2.2.2.1 *Support mechanisms to raise entrepreneurship awareness*

Table 4.5 illustrates that students' entrepreneurship clubs or associations are the only support mechanisms that exist at HEIs in Rwanda. Seven HODs (9.5%) mentioned that it is the only types of support mechanism that is available within their institution. Business plan competitions, entrepreneurship web pages and entrepreneurship centres as mechanisms to raise entrepreneurship awareness among undergraduates are not available at HEIs in Rwanda.

	Yes		No		Do not Know		No response		Total	
	n	%	n	%	n	%	n	%	N	%
Student business plan competition	0	0	49	66.2	17	23	8	10.8	74	100
Have an entrepreneurship web-page	0	0	65	87.8	8	10.8	1	1.4	74	100
Centre in entrepreneurship	0	0	72	97.3	1	1.4	1	1.4	74	100
Club or Association for students entrepreneurs	7*	9.5	49	66.2	16	21.6	2	2.7	74	100

\*An analysis of questionnaires shows that the 7 departments that affirm to have a student entrepreneurship club are located in the same institution- the KIST. A verbal communication with the Entrepreneurship HOD reveals that the institution has only 1 student entrepreneurship club.

Discussion:

It is apparent from the results of this study that HEIs in Rwanda are not equipped with the necessary infrastructure and resources oriented towards raising awareness about entrepreneurship. Out of all 74 HODs who completed the questionnaire, only seven pointed out that there are students' entrepreneurship clubs or association. However, a close examination of the returned questionnaires indicates that all the seven HODs belong to one institution of higher learning. This means that there is only one higher education institution that has a students' entrepreneurship club. It is also evident that business plan competitions do not figure in any HEI activities. Furthermore, web pages dedicated to entrepreneurship education together with entrepreneurship centres are inexistent at HEIs in Rwanda. This might affect the awareness of entrepreneurship as a career option and it might also affect students' knowledge and skills. The Internet, for example, constitutes a resource that can be used by students and the faculty to more easily "acquire the needed knowledge to develop feasibility studies and business plans,

gain access to market data and research industry and economic trend” (Solomon, Duffy and Tarabishy, 2002:82). Ridder and Sijde (2003) point out that competitions to write a business plan is an opportunity to raise awareness of entrepreneurship among students.

However, the lack of awareness raising support mechanisms at HEIs in Rwanda could be explained by the lack of expertise and financial resources. For example, creating Internet class materials requires information technology expertise from the lecturers and it further assumes that students have easy access to computer facilities. Charney and Libecap (2000:2) add to these financial and time constraints. They point out that “preparation of plans and their presentation at business plan competitions are costly activities”.

4.2.2.2.2 *Support mechanisms to facilitate creation of students' enterprises at HEIs*

From Table 4.6 it is evident that six HODs (8.1%) acknowledge that their institutions are endowed with mechanisms to provide advice and equipment to spin-off. Only 3 HODs (4.1%) recognize that there are mechanisms to provide financial assistance to spin-off. However, there is no business incubation available at HEIs in Rwanda.

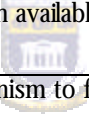


Table 4.6: Availability of support mechanism to facilitate spin-off firms at HEIs in Rwanda. N=74

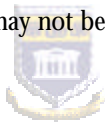
	Yes		No		Do not Know		Non response		Total N (%)	
	n	%	n	%	n	%	n	%	N	%
Mechanisms to provide financial assistance to spin-off firms	3	4.1	37	50	28	37.8	6	8.1	74	100
Business incubation facilities for Spin-offs firms	0	0	39	52.7	26	35.1	9	12.2	74	100
Mechanisms to provide advice to spin-off firms	6	8.1	31	41.9	30	40.5	7	9.5	74	100
Mechanism to provide equipment to spin-off firms	6	8.1	33	44.6	27	36.5	8	10.8	74	100

Discussion:

Educational institutions are expected to provide an entrepreneurial environment that would encourage and facilitate entrepreneurship. Kent, Sexton and Vesper (1982: 289-292) define a conducive entrepreneurial environment “as a situation in which prospective founders of new firms have a high awareness of past entrepreneurial actions, of source of

venture capital, and of individuals and institutions that might provide help and advice”. It is evident from the results shown in Table 4.6 that there is a low level of provision of support for spin-off firms at HEIs in Rwanda in terms of financial assistance (4.1% of departments surveyed), and in terms of availability of mechanisms to provide advice and equipment to spin-off firms (provided only by 8.1% of departments surveyed). As mentioned by Consiglio and Antonelli (2001:2) “the phenomenon of Academic spin-off (i.e. the birth of new firms by academic community members) is more common and developed especially where there is a relational context that gives to the new entrepreneurs assistance, consultancy, contacts, information and the necessary financial support to start a new business”.

Based on these results, it can be deduced that entrepreneurship education at HEIs in Rwanda does not provide opportunity to experience entrepreneurship and to enhance necessary competencies for start-ups that might affect the student propensity towards entrepreneurship as a career option. According to Bridge, O’Neill and Cromie (1998, 230), “people choose occupations that they know something about, and in the absence of a conception of entrepreneurship this may not be a realistic option for many” students at HEIs in Rwanda.



The results presented in Tables 4.5 and 4.6, respectively, exhibit some limitations. It is evident that HODs had some difficulties to report entrepreneurship support mechanisms given the rate of item non-responses (10.8% for some questions) and high percentage of "Do not know" responses (up to 40.5%). This is probably due to technical jargon like ‘spin-off firms’, ‘business incubation’, or ‘business plan competition’ that are not common to non-business HODs who were considered for this study. This implies that a pilot study was necessary before the researcher could collect data.

#### **4.2.3 Profile of entrepreneurship curricula at HEIs in Rwanda**

The profile of an entrepreneurship curriculum in this context refers to entrepreneurship/small business management courses, their aims, their content, and the teaching and assessment methods. The specific objectives of this section is to identify entrepreneurship courses provided at HEIs in Rwanda and to determine their aims, content, the teaching and assessment methods.

From the survey of Heads of Departments, 12 lecturers of entrepreneurship/small business management courses were identified and they were contacted for the purpose of this study. They all participated in the survey and the results are presented and discussed in the sub-sections below.

#### 4.2.3.1 Entrepreneurship courses and their primary aims

Entrepreneurship literature provides evidence of the confusion that exists between entrepreneurship courses and small business management courses (Hills, 1998; King, 2001; Solomon, Duffy and Tarabishy, 2002). Small business management courses focus on ongoing small business (Solomon, *et al.*, 2002) while entrepreneurship courses emphasize business entry (Winslow, Solomon and Tarabishy, 1999). However, for the purpose of this study, the term 'entrepreneurship courses' is used to indicate both entrepreneurship and small business management courses.

##### 4.2.3.1.1 *Entrepreneurship courses taught at HEIs in Rwanda*

Heads of Departments were asked to specify which entrepreneurship courses were offered in their departments and at the same time they had to indicate at which level they were offered. Table 4.7 shows that 16 entrepreneurship subjects were identified at HEIs in Rwanda. Eight of them are offered by two institutions, namely the UNR and UNILAK, which offer a set of four courses each.



Course Name	Institution	Department/ Faculty	Class	Nature of the subject
Entrepreneurship Development	KIST	Service Department	All third years	Compulsory
Foundations of entrepreneurship and small business management	KIE	Business education	2 <sup>nd</sup> Year	Compulsory
Business Planning	KIE	Business education	3 <sup>rd</sup> year	Compulsory
Entrepreneurship	KIE	Computer Science	3 <sup>rd</sup> year	Compulsory
SME Management	ULK	Management	3 <sup>rd</sup> year	Compulsory
Entrepreneurship	ULK	Social Sciences	4 <sup>th</sup> year	Compulsory
*Developing entrepreneurial Competencies	UNR & UNILAK	Management	3 <sup>rd</sup> years	Elective
*Promotion of Small and Micro Enterprises	UNR & UNILAK	Management	3 <sup>rd</sup> years	Elective
*Entrepreneurial environment and informal sector	UNR & UNILAK	Management	3 <sup>rd</sup> years	Elective
*Entrepreneurship and Small business management	UNR & UNILAK	Management	3 <sup>rd</sup> years	Compulsory
Business Planning SME management	UNR UAAC	Agriculture Business Administration	3 <sup>rd</sup> year 3 <sup>rd</sup> year	Compulsory Elective

\* These four courses are offered by two universities and have the same curriculum. They have been counted double. This brings the total number of courses to 16.

 Entrepreneurship topics
  Business planning topics  
 SME Management topics

The table also indicates that only three entrepreneurship subjects are offered outside of the management and business departments. The targeted audiences for entrepreneurship courses are mainly in their third year. Table 4.7 also indicates that seven out of the 16 courses are electives.

### Discussion

It is evident that a wide range of entrepreneurship courses is offered at HEIs institutions in Rwanda. This study has identified 16 entrepreneurship subjects. Menzies (2003) reported that in Canada they have a similar broad range of courses with 15 courses at undergraduate level and 10 at graduate level. However, at undergraduate level entrepreneurship courses offered include:

Small Business Management; New Venture Creation; Projects in Business/Research Area; Starting a Small Business; Business Plans; Introduction to Entrepreneurship (Overview); Introduction to Entrepreneurship (introduction to the field); Management Consulting and Facilitation; Innovation Management; Family Business; Creativity; Enterprise Finance, High Growth Ventures; Intrapreneurship; and International Entrepreneurship. From table 4.7, three topics appear to emerge frequently from the list of courses offered at HEIs in Rwanda: Entrepreneurship, SME management and Business Planning and it can be deduced that topics covered in the field of entrepreneurship are limited in terms of scope of topics.

In addition, it is said that three or more courses bound together produce more positive outcomes (Hindle, 2001) than single course or electives that reach only a minority of learners (Ronstdat, 1985). Table 4.7 illustrates that most of the courses at HEIs in Rwanda are offered by the departments of management and business studies and it is also evident that the majority of departments offer a single course. In addition, about the half of courses offered (7 courses of 16) are electives. Based on these results, one could deduct that entrepreneurship courses will have less impact on the student propensity toward entrepreneurship.



#### 4.2.3.1.1.2 *Primary aims of entrepreneurship courses*

Twelve entrepreneurship lecturers were asked to rank the order of priorities of courses they were teaching in terms of the primary aims. They were provided with three options among which they had to rank the primary, the secondary and the third aim of their courses. The three options were:

- to prepare students for entrepreneurship
- to teach general business skills
- to teach students about entrepreneurs and their role in economic development

Figure 4.1 illustrates how entrepreneurship lecturers at HEIs in Rwanda rank the aims of courses they are teaching.

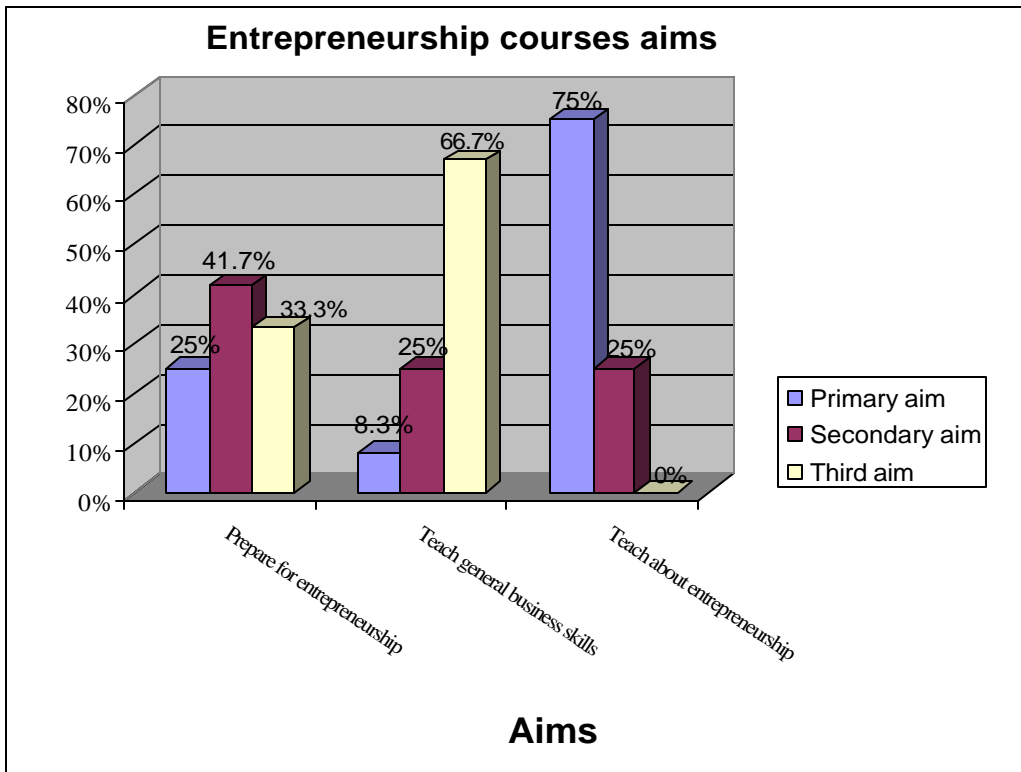


Figure 4.1: Primary aims of entrepreneurship courses

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The results indicate that the majority of lecturers (75%) considered *teach about entrepreneurship* as the primary aim of entrepreneurship courses. Only three respondents (25% of lecturers) regard *preparing students for entrepreneurship* as the first aim of the entrepreneurship course they teach. The results also indicate that 8.3% of the lecturers acknowledge that general business skills constitute the first aim of their entrepreneurship courses.

### Discussion

Entrepreneurship literature provides evidence of the confusion that exists between entrepreneurship courses, small business management courses and traditional management courses (Solomon, Duffy and Tarabishy, 2002; King, 2001; Hills, 1998). This ambiguity can be resolved, based on the aim of the curriculum of each of the above courses. Small business management courses focus on operating and managing existing enterprises (Solomon, *et al.*, 2002) while entrepreneurship courses emphasize business entry (Winslow, Solomon and Tarabishy, 1999). Therefore, entrepreneurship education

can aim at preparing learners for entrepreneurship (focus on small business creation) or it can teach about entrepreneurship, i.e. focusing on the transfer of theoretical knowledge about the field (Hartshorn, 2002; Postigo and Tamborini, 2002; Fälsang and Alberti, 2000; Levie, 1999). Generally, it is accepted that the aim of an entrepreneurship course is to develop knowledge and skills base necessary for the creation of enterprise.

The findings from the survey of entrepreneurship courses at HEIs in Rwanda indicate that the primary aim of entrepreneurship modules or electives as reported by the majority of lecturers (75%) at HEIs in Rwanda is to teach about entrepreneurship and the role of entrepreneurs in economic development. Preparing students for entrepreneurship is found to be a distant secondary aim of entrepreneurship classes. It can be deduced that entrepreneurship education provided at HEIs in Rwanda basically aims at equipping students with theoretical knowledge about entrepreneurship.

The findings imply that students taking entrepreneurship courses at HEIs in Rwanda are only sensitised to the possibility of starting their own enterprises, but are not given the opportunity to practically experience entrepreneurship. Nevertheless, the literature widely agrees that entrepreneurship education gives successful results in terms of skills and competence building when students are given the opportunity to experience entrepreneurial activities (Cooper, Bottomley and Gordon, 2004). Consequently, very few students from HEIs in Rwanda will consider entrepreneurship as a career option after their graduation as they have not been socialized to entrepreneurial activities.

#### 4.2.3.2 Entrepreneurship learning contents

Question 4 of the questionnaire addressed to entrepreneurship and/or small business management lecturers, presented a list of five categories of learning content and each lecturer was asked to indicate the learning content that applies to the course he was teaching. Figure 4.2 shows that 81.3% (13 modules) of courses taught at HEIs in Rwanda focus on venture management, followed by 50% of courses that include marketing skills in their contents. Another most cited theme is risk evaluation with 45.3% of courses reported to enclose risk evaluation in their content. Only six courses (37.5% of taught courses) have been reported to include opportunity recognition and resource needs planning in the course content.

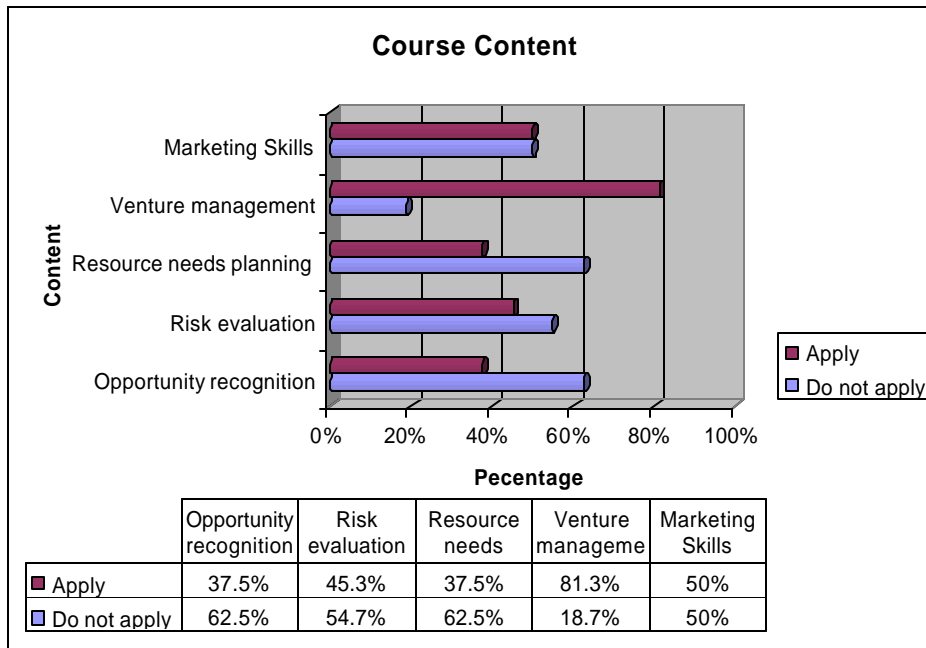


Figure 4.2: Entrepreneurship course contents

To get an accurate understanding of the content of entrepreneurship courses at tertiary institutions in Rwanda, an analysis of the manifest content of entrepreneurship courses has been undertaken (See Appendix 3). This analysis was based on a one-page document outlining the course objectives and contents for each course related to entrepreneurship. These documents were provided by entrepreneurship lecturers at the time of the survey. Table 4.8 summarizes the findings.

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Course list	Content	Opportunity recognition	Business Plan writing	Entrepreneurship notions and SME management
1. Entrepreneurship Development		X <sup>a</sup>	X	X
2. Foundations of Entrepreneurship and Small Business Management		X <sup>b</sup>	-	X
3. Entrepreneurship		X <sup>b</sup>	-	X
4. Business Planning		X <sup>a</sup>	X	-
5. SME management		-	-	X
6. Entrepreneurship		-	-	X
7-8. Developing entrepreneurial competences*		-	-	X
9-10. Promotion of SMEs*		-	X	-
11-12. Entrepreneurial environment and the informal sector*		-	-	X
13-14. Entrepreneurship and Small Business Management*		X <sup>a</sup>	X	X
15. Business planning		-	-	X
16. SME management		-	-	X
X <sup>a</sup> indicates that "opportunity recognition" appears in the course content under the Business Plan rubric; X <sup>b</sup> indicates that "opportunity recognition" is taught as part of general knowledge about entrepreneurship. * These courses are taught in two different Universities (NUR and UNILAK) with the same content and objectives and have been taken together to avoid replication. This brings the total of entrepreneurship courses to 16.				

The content analysis shows that the contents of entrepreneurship courses at HEIs in Rwanda can be grouped under three categories: opportunity recognition, business plan writing, and entrepreneurship and SME management. The analysis also shows that the majority of courses (13 of the 16 courses) emphasise the notion of entrepreneurship and SME management. Only five courses include the notions of business planning and the same proportion of courses include the notion of opportunity recognition in their content. However, opportunity recognition appears mainly in the course contents as part of Business Plan writing or Entrepreneurship as a subject. There is no specific course that focuses on opportunity recognition.

### Discussion

Despite the low degree of agreement among researchers on the content of entrepreneurship courses, opportunity perception and evaluation, the marshalling and commitment of resources to pursue the opportunity, the creation and operating business

venture to implement the opportunity-motivated business idea are recognized attributes that should lie at the core of 'real entrepreneurship education (Kourilsky,1995).

It is apparent from Figure 4.2 and Table 4.8 that the majority of entrepreneurship courses at HEIs in Rwanda emphasise venture management and theoretical knowledge about entrepreneurship. The results indicate that 81.3% of courses focus their learning content on the notions of entrepreneurship and small business management. These findings are not specific to Rwanda. For instance, Alberti, *et al.* (2004) argue that most business schools normally offer courses in entrepreneurship that foster business general knowledge (i.e. knowledge that applies to business in general, both new and established firms) and venture specific knowledge (i.e. knowledge that is fairly general to ventures).

Le Roux and Nieuwenhuizen (1996) and Faoite, Henry, Johnston and Sijde (2003) assert that financial management, marketing and management appear to be the most popular topics in entrepreneurship programmes, coupled with an excessive focus on the development of a business plan. In the context of tertiary education in Rwanda, the survey reveals that 50% of courses include marketing topics and 45.3% includes risk evaluation in their contents. However, the excessive focus on the development of business plans of most entrepreneurship programmes, evoked by the same authors, does not support the findings in Rwanda. In fact, the results of this survey indicate that only six entrepreneurship courses (37.5%) at tertiary education in Rwanda include business plan writing in their contents. This might be explained by the lack of expertise of lecturers, specifically with regard to business plan writing and in general with regard to entrepreneurial skills as indicated in point 4.2.1. From this discussion it can be deduced that the learning contents of entrepreneurship education in Rwanda is mainly oriented toward the development of skills necessary for operating and managing ventures and rarely does it focus on the competencies necessary for starting and developing a venture.

A compelling observation is concerned with the low proportion of courses including opportunity recognition in their content. From the results of our survey with lecturers teaching entrepreneurship, it is showed that only 37.5% of courses (i.e. six courses) emphasise opportunity recognition in their contents. The content analysis of entrepreneurship learning objectives and contents (see Table 4.8) shows that opportunity recognition appears mainly in the course contents as part of business plan writing or as

part of general theories of entrepreneurship as a course. This indicates that entrepreneurship courses at HEIs in Rwanda focus less on the process of opportunity identification, and it can be assumed that the content of entrepreneurship courses is not appropriate as regard to building the necessary skills for opportunity identification and development. As pointed out by Kourilsky (1995) entrepreneurship programmes whereby the students do not personally experience the search for the market opportunity and the generation of the new business idea, these programmes are missing the heart of the entrepreneurship process.

#### 4.2.3.3 Methods of teaching entrepreneurship

Entrepreneurship lecturers were given the possibility to indicate from a list of teaching practices (see questionnaire Appendix 2) what teaching methods are commonly applied to the modules or electives they are teaching.

Table 4.9 shows that the common teaching methods applied by entrepreneurship lecturers at HEIs in Rwanda consist of lectures and readings. All 12 lecturers (100%) mentioned that they use lectures, coupled with readings to teach entrepreneurship. The results also indicate that 50% of the respondents use individual projects, group projects and foreign case studies to teach entrepreneurship and/or small business management courses. However, the results reveal that none of the respondents is using business simulation, multimedia exercises and video cases as teaching methods. At the same time, “students interviewing entrepreneurs” is not used as a pedagogical method at HEIs in Rwanda.

Teaching methods	Apply	Do not apply
Lectures	100%	0%
Individual projects	50%	50%
Group projects	50%	50%
Real case studies	16.7%	83.3%
Fictional case studies	8.3%	91.7%
Local case studies	8.3%	91.7%
Foreign case studies	50%	50%
Business simulation	0%	100%
Multimedia exercises	0%	100%
Video cases	0%	100%
Guest speakers	25%	75%
Entrepreneurs interviewed by students	0%	100%
Role-playing	16.7%	83.3%
Readings (i.e. Chapters of books, journal articles...)	100%	0%



## Discussion

It is evident that lectures and the use of readings together with projects and case studies constitute the teachings methods that are unanimously used to teach entrepreneurship courses. The findings of this survey are, however, supported by the findings of surveys conducted by Ahiaiah (1989) and Winslow, *et al.* (1999) which indicate that the most widely used pedagogical techniques for entrepreneurship education was a combination of lectures and case studies.

However, using lecture-based educational methods and case studies to teach entrepreneurship has been under criticisms. For example, Cooper, *et al.* (2004: 13) argue that, “while the lecture-focused educational methods, using formal lectures and cases studies could be praised for their academic rigour, they did not encourage student learning through experience”. They further assert that these pedagogical methods encourage the acquisition of analytical approaches relevant in a large firm context, but which leave little room for insight and intuition necessary for an entrepreneurial environment. Indeed, they are not appropriate for entrepreneurship education if they are not associated with active methods. Contrary to the situation in Rwanda, Ahiaiah (1989) found that assigned readings were the least preferred methods. Nevertheless, it is acknowledged that these methods of teaching entrepreneurship emphasise a set of values and abilities that are inimical to an entrepreneurial spirit (Gibb, 1993).

The results of this study show that business simulation, multimedia exercises, video cases, students interviewing entrepreneurs are not used as teaching methods at tertiary institutions in Rwanda. Only a small number of courses incorporate role-playing (16%) or guest speakers (25%) into their teaching techniques. This implies that students attending entrepreneurship courses at tertiary institutions in Rwanda are not given the opportunity to develop practical skills and to experience entrepreneurship. Yet, giving students opportunities to experience entrepreneurship is widely recommended for effective entrepreneurship teaching. Simulations (computer and behavioural), interviews with entrepreneurs, field trips, the use of videos and films, etc are among methods that are used for experiential learning (Solomon, *et al.*, 2002). Two factors already highlighted in 4.2.1 and 4.2.2.2, namely the lack of expertise among faculties and the lack of support mechanisms could contribute to explaining the results discussed in this paragraph.

#### 4.2.3.4 Assessment methods

Assessment of entrepreneurship education includes the assessment of both the individual student and the programme as a whole (Solomon, *et al.*, 2002). One of the objectives of this survey was to determine methods used at tertiary education in Rwanda to assess students attending entrepreneurship classes. In the context of this study, assessment methods are regarded from the perspective of the individual student. The results of this survey presented in Figure 4.3 indicate two major trends concerned with the evaluation of students taking entrepreneurship classes:

- The commonly used assessment methods within entrepreneurship classes are written exams and essays. The survey findings show that all lecturers of entrepreneurship/small business management courses (12 lecturers) assess their students on the basis of written exams. Eleven lecturers (91.7%) use essays as a means to assess their students;
- Business plan writing constitutes the third most often-used methods to evaluate students. In fact, 50% of lectures affirm to asking their students to write business plans in the course of their learning process.

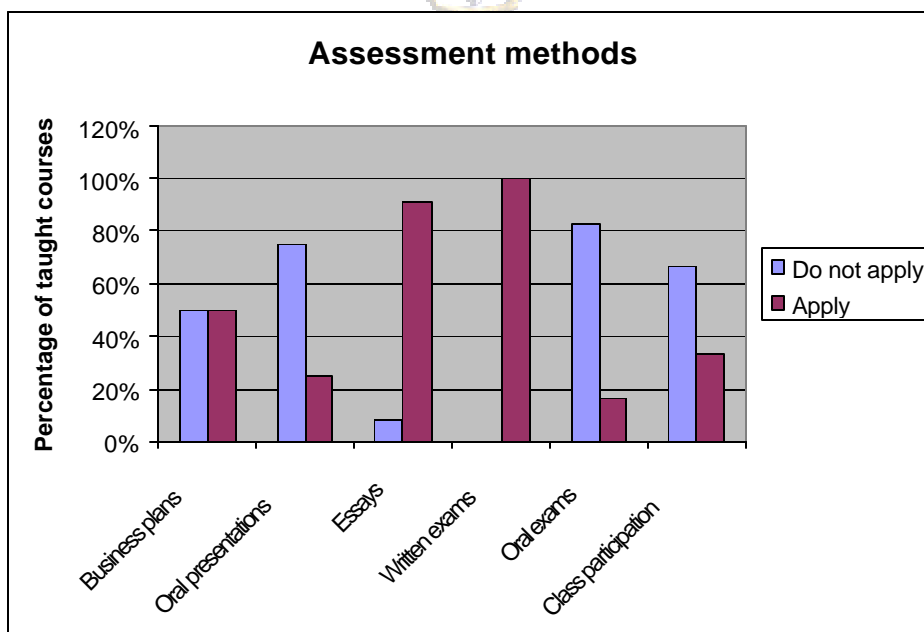


Figure 4.3: Assessment methods used in Rwanda for entrepreneurship classes.

## Discussion

The results of this analysis show clearly that written exams and essays, followed by business plan writing are major tools utilised in the process of assessing students in entrepreneurship. A survey done in Wales (Levie and Brown, 2003) shows similar results with slight variations. For instance, it is indicated that oral presentation and business plans are the most commonly used methods of assessment followed by written exams. For them, these results reflect the decline of classes that teach *for* rather than *about* entrepreneurship in tertiary institutions and they affirm that this is an indication of a slide back to traditional assessment methods.

In the context of tertiary education in Rwanda, it can be argued that traditional assessment methods are the norm as it is reflected in the use of written exams and essays. Traditional examination-based assessment, while praised for establishing norms across a student group, they are criticised for not being effective in the measurement of individual learning. Innovative assessment methods that encourage reflection on the learning experience are called for (Cooper, *et al.*, 2004:15).



### 4.3 SUMMARY

This chapter presented and analysed the data gathered from course description documents and questionnaires. The researcher discussed the findings from the perspective of a general profile of formal entrepreneurship education provision and from the perspective of entrepreneurship education curriculum profile at Higher Education Institutions (HEIs) in Rwanda.

With regard to the profile of formal entrepreneurship education, the researcher described it in terms of the level of provision of entrepreneurship education (degree, diploma, certificate, and dedicated courses), standing of entrepreneurship courses (single course or set of courses, compulsory or electives), and support mechanisms (entrepreneurship centres, incubators, consultancy, competitions, etc). With regard to the profile of the entrepreneurship curriculum, the researcher described it in terms of four factors: aims, content, teaching methods, and assessment methods.

The underlying aim of the study was to ascertain the extent to which these factors were appropriately developed for entrepreneurship education.

With reference to the level of provision of entrepreneurship, the researcher observed that the highest level of provision of entrepreneurship education was limited to entrepreneurship offered as part of another course and only very few dedicated entrepreneurship courses (i.e. courses focusing primarily on entrepreneurship) were reported. Obviously, no institution offered a programme that would lead to an academic qualification in entrepreneurship. In terms of standing of entrepreneurship courses, the researcher observed that the majority of HEIs offered entrepreneurship courses as stand alone (single) courses as their highest level of entrepreneurship education provision. With regard to the provision of support mechanisms to facilitate entrepreneurship education, it was observed that HODs experienced problems with reporting support mechanisms available in their institutions, thus the validity of their response has to be verified. Nevertheless, the researcher observed that there was little formal support to entrepreneurship education at HEIs in Rwanda.

From the perspective of an entrepreneurship education curriculum, the findings showed that the primary aim of entrepreneurship courses was to teach *about entrepreneurship*, but

not *for entrepreneurship*. In terms of learning content, the majority of entrepreneurship courses emphasized venture management and theoretical knowledge about entrepreneurship. As far as teaching and assessment methods are concerned, the researcher observed that lecture-based methods were the most frequently used methods to teach entrepreneurship courses, while assessment methods mainly focused on written exams and essays.

The findings from this study illustrate that the provision of entrepreneurship education at HEIs in Rwanda does not conform to what the literature reviewed in chapter 2 expects or recommends as best practice in entrepreneurship education.

Based on the findings from this study, the researcher established that there is little evidence to prove the evolution of entrepreneurship education at HEIs toward an entrepreneurial approach. Instead, the traditional business education approach (teaching management of existing business by means of lecture-based methods) prevails as an approach to teaching entrepreneurship at HEIs in Rwanda.

From the discussions of research findings presented in this chapter, the researcher will establish the implications and recommendations for entrepreneurship education at HEIs in Rwanda in Chapter 5.

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## CHAPTER FIVE

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### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 INTRODUCTION

The final chapter presents an overview of the study, which includes a summary of the major findings, the implications of the results and recommendations for developing entrepreneurship education at HEIs in Rwanda.

#### 5.2 OVERVIEW OF THE STUDY

This study is grounded on an investigation of issues of entrepreneurship education in the curriculum at HEIs in Rwanda. Entrepreneurship education is all about the structured or formalized conveyance of entrepreneurial skills, attitudes and behaviours used in the process of identifying opportunities and generation of a business idea to address the opportunity, evaluation and commitment of resources to pursue the opportunity and the creation of an operating business to implement the opportunity.

Literature on economic growth in both industrialized and developing countries points out the particular role of entrepreneurship and small business as a possible solution to the rising unemployment rate and as recipe for economic prosperity. In addition, the contribution of entrepreneurship to wealth generation, creativity and innovation, and the redistribution of opportunities are documented.

Since entrepreneurship can positively affect economic growth and development, many studies have been concerned with the question of how to create an enterprise culture, which will further foster the development of small firms. Policies that reform the market in order to encourage entrepreneurship both economically and educationally are found to affect the supply of entrepreneurship. However, fostering entrepreneurship through education has gained increased recognition as a means to develop an entrepreneurship culture. In fact, it is well-documented that entrepreneurship education does increase business knowledge and promote psychological attributes associated with successful entrepreneurs.

The major challenge to accomplishing the educational objectives of entrepreneurship education as highlighted above, involves the examination of programme contents and pedagogical methods used to teach entrepreneurship. This concern is premised on the recognition that traditional forms of educating entrepreneurs have shown to be inappropriate with respect to enhancing the motivation and competencies of students towards innovation and entrepreneurship.

For the past decades, an increasing number of researchers and practitioners have been concerned with advancing the knowledge of the content that is taught and approaches to improving pedagogies used in teaching entrepreneurship. The argument is that the propensity or inclination towards entrepreneurship as a career option might be influenced by a creative curricula. Findings of a number of projects stress the importance of hands-on experience and learning-by-doing situations as regard to imparting entrepreneurial behaviour and attitudes.

Therefore, as suggested in the literature, if the education system is to produce enterprising students, then an analysis of a number of educational and pedagogical issues does matter. As pointed out by Ronstadt (1987) what should be taught and how it should be taught are the relevant questions to ask.

It is within the above context that this research was generated. More specifically, in view of the rising unemployment rate amongst graduates from HEIs in Rwanda, the researcher became interested in whether entrepreneurship education at HEIs was appropriately developed to prepare students for entrepreneurship as a career option. Since there is abundant evidence in the literature that creative and innovative curricula and pedagogies have an impact on students' propensity towards entrepreneurship as a career option, it was then a challenge to establish whether entrepreneurship course objectives, contents, teaching and assessment methods were appropriate in view of what the literature expects or demands.

### 5.3 SUMMARY

It is within the framework indicated above that this research was approached. This study was carried on following a plan indicated below:

In Chapter 1 the background and the context of the study were discussed with particular reference to the lack of entrepreneurship bias within the education system in Rwanda and the necessity to make entrepreneurship education an integral part of tertiary education. In this chapter the research problem was also identified, the research questions were formulated, and the research aim and objectives were identified. The main aim of the study was to ascertain whether the support mechanisms, course objectives, contents, teaching and assessment methods provided at HEIs were appropriately developed to prepare students for entrepreneurship as a career option. In addition, the significance of the study and the overall structure of the study were presented.

Chapter 2 presented a review of the literature on entrepreneurship education. The chapter began with working definitions of key terms such as entrepreneurship, enterprise, and entrepreneurship education used in this thesis. The chapter proceeded with contrasting entrepreneurship education to traditional business education, then entrepreneurship courses were compared to small business management courses. The relevance of entrepreneurship education was discussed, followed by a presentation of entrepreneurship as a global phenomenon. The chapter concluded with a discussion of essential issues in entrepreneurship education which impact on the development of an entrepreneurship education.

In Chapter 3, the researcher presented the research design and methods used in the study. The research design followed a quantitative approach and the primary methodology used a descriptive research design. Documentary evidence and self-administered questionnaires were used as data collection tools. Data were collected from one universe constituted of Heads of Departments (HODs) and another composed of entrepreneurship lecturers. Given that the entire universe of HODs and lecturers was small, everybody was sampled, and a high rate of returned questionnaires was achieved. This proved the data collection technique used, to be a census.



Chapter 4 presented the observation from the survey questionnaires and primary research data were analysed and discussed. The chapter commenced with an analysis of the profile of formal entrepreneurship education at Higher Education Institutions in Rwanda, and then proceeded with the analysis of entrepreneurship education curriculum and pedagogies. The profile of formal entrepreneurship education at HEIs in Rwanda was analysed based on the level of provision, the standing of entrepreneurship courses and the support mechanisms available at HEIs for entrepreneurship education. With regard to the profile of entrepreneurship education, it was examined on the basis of four factors, namely, primary aims of entrepreneurship courses, the course contents, the teachings methods, and assessment methods. Each of these factors was discussed in relation to what the literature germane to entrepreneurship education expects or demands in order to determine whether entrepreneurship education at HEIs in Rwanda was appropriately developed.

An overview of the study was presented in Chapter 5. It consisted of a summary of the process followed in the study, followed by a conclusion emphasizing the implications of the research results. The chapter concluded with a number of recommendations for policy, practice and further research in the field of entrepreneurship education at HEIs in Rwanda.

#### **5.4 LIMITATIONS TO THE STUDY**

Although the researcher believes that the methods used for this project represent a rigorous attempt to comply with academic requirements for a research project at the University of the Western Cape, there are several limitations to this study:

1. The study investigated the appropriateness of entrepreneurship education through an indirect assessment limited to HODs and entrepreneurship lecturers. Additional studies should integrate the students' perspectives. Other aspects, which the study could have expanded on, include the specific entrepreneurial skills to be developed to be successful in the business world. In this regard, it would have been interesting to obtain the viewpoint of successful entrepreneurs.
2. The use of a single method of data collection constitutes a limitation. There is a need for improved methodologies that can triangulate research methods so as to

get an in-depth understanding of various intervening factors such as perceptions, attitudes, and motivation at differing levels, including the university administration, lecturers and students.

3. The adoption of a questionnaire constructed in the context of an industrialized country has proved not to conform to the academic reality of a less developed country such Rwanda, specifically in terms of the support mechanisms to entrepreneurship education. For further research, the researcher strongly recommends the construction of a data collection tool that reflects the reality of entrepreneurship education in Rwanda.

## **5.5 CONCLUSIONS**

In the context of this study, it is clear that entrepreneurship education at HEIs in Rwanda is rather not appropriately developed to prepare students for entrepreneurship as a career option. The analysis of research findings raises two main issues:

1. The role of Higher Education Institutions in terms of developing entrepreneurship education;
2. The appropriateness of entrepreneurship courses aims, contents, teaching and assessment methods with regard to imparting entrepreneurial skills, competencies and attitudes among students.

With regard to the first issue, no Higher Education Institution offers a programme in entrepreneurship that is developed to provide an academic qualification in terms of a diploma or a degree in entrepreneurship. The highest level of entrepreneurship education provision is limited to entrepreneurship taught as part of another course, and only very few dedicated entrepreneurship courses are offered at HEIs in Rwanda (i.e. courses that fully focus on entrepreneurship and small business topics). In addition, most dedicated entrepreneurship courses are offered by management/business studies departments, and they tend to be offered as stand alone courses.

Based on the results of this survey, the researcher concludes that the level of entrepreneurship education provision at HEIs in Rwanda is low. It is even acceptable to

say that there is no entrepreneurship programmes at HEIs in Rwanda as entrepreneurship tends to be taught as an add-on to the general curriculum.

The researcher's conclusion is justified by the findings of similar surveys in the United Kingdom, the United States of America, and Wales, which indicate a high provision rate of entrepreneurship education at tertiary institutions. The higher level of provision of entrepreneurship education in the tertiary education system of these three industrialized countries can be explained by the fact that, entrepreneurship as a scholarly discipline emerged and gained recognition earlier by academic institutions and authorities, which is evidently not the case in Rwanda

Despite the invitation from various stakeholders to integrate entrepreneurship in the curriculum and subsequent recognition in the political arena in Rwanda that education can contribute to building a generation of educated entrepreneurs as discussed in Chapter 1, the evidence from findings of this study reveals that HEIs in Rwanda have failed to comply with the long-term needs of the labour market in terms of the provision of a higher levels of entrepreneurship education.

The study further shows that entrepreneurship education at HEIs in Rwanda is typically characterized by a lack of support mechanisms that are required to raise student awareness about entrepreneurship and provide experience that approximate the real world of entrepreneurs. The implications of these findings are that students are not given the opportunity to develop necessary skills and competencies required for entrepreneurship activities. As this, entrepreneurship will not be considered as a possible career options for them. The high rate of unemployed graduates highlighted in Chapter 1 can probably be justified by both the low level of provision of entrepreneurship education as well as the lack of support mechanisms that can raise their awareness and provide them with the opportunity to socialize with entrepreneurial activities while they are still at university.

With regard to the second issue concerned with appropriateness of an entrepreneurship curriculum, which includes course aims, objectives, teaching and assessment methods, it is evident from the findings of this study that entrepreneurship education at HEIs

generally does not focus on activities that will give students the opportunity to experience and feel the concept rather than just learn about it.

Entrepreneurship courses offered at HEIs are limited in breadth and depth. Only three topics, entrepreneurship, business planning, and SME management tend to appear frequently within the list of 16 entrepreneurship courses offered at HEIs in Rwanda. Most of the courses have a low standing as they tend to be offered as single courses and the majority of them are electives, meaning that students are not required or forced to attend these courses. Based on these findings, it is suitable to say that entrepreneurship courses will have less impact on the students' population at university. Literature suggests that more courses that are bound together produce more positive outcomes than single courses or electives that reach a minority of learners.

As far as course aims and objectives are concerned, the majority of courses taught at HEIs in Rwanda tend to aim at teaching about entrepreneurship. Generally it is accepted that courses that teach learners about entrepreneurship aim at transferring theories, which refer to the entrepreneurs, the creation of firms, the contribution to economic development, the entrepreneurial process and the small and medium size firms. In this context, students remain at a distance from the subject. In other words, students learn *about* enterprise through a theoretical and conceptual framework. Thus they are not exposed to the real world of entrepreneurs. It appears then that entrepreneurship courses at HEIs in Rwanda lack a practical side in their aims; consequently, these courses will have little impact on the students' skills and competencies. Successful results in terms of skills and competence building are achieved through giving students the opportunity to experience entrepreneurial activities. Considering that the aim of entrepreneurship courses is to develop knowledge, skills and competencies necessary for the creation of enterprise. It can be concluded that the aim of entrepreneurship courses at HEIs in Rwanda are not appropriate for entrepreneurship education.

Generally, the aims and objectives of a course (or course goals) provide information on its content (Alberti, *et al.*, 2004). The content of the majority of entrepreneurship courses at HEIs focuses on venture management and the theoretical side of entrepreneurship. In this respect, the content of entrepreneurship courses is consistent with the aim of the same courses as discussed in the previous paragraph but does not conform to what is

suggested in the literature. Entrepreneurship course contents should focus on the features needed to conceive of and start a new business; thus, they should include three attributes, namely, opportunity recognition, marshalling and commitment of resources, and, the creation and operating of a business venture. However, from the findings of this study, it is evident that the contents of entrepreneurship courses do not provide the opportunity for student to personally experience the search of market opportunities and the generation of business ideas. These findings imply that the content of entrepreneurship courses at HEIs in Rwanda is not appropriate as far as building skills necessary for opportunity discovery, evaluation, and exploitation are concerned.

With regard to teaching and assessment methods, the findings of this research point out that, traditional methods are the norm at HEIs in Rwanda, and they include lecture-based methods, cases studies, written exams and essays. Teaching entrepreneurship using traditional methods implies that students from HEIs in Rwanda are not given the opportunity to experience the frustrations associated with entrepreneurial activities. Therefore it can be said that entrepreneurship teaching and assessment methods used at HEIs in Rwanda do not foster the needed entrepreneurial skills and attitudes, as opposed to entrepreneurial methods that propose to develop the core skills and the required attributes to roll out a new venture and to identify pre-start-up needs through active and experiential learning.

## 5.6 SYNTHESIZING ENTREPRENEURSHIP EDUCATION AT HEIs IN RWANDA

From the findings of this study, and based on the main issues in entrepreneurship education presented by Alberti, *et al* (2004) the researcher presents in Figure 5.1 a map that synthesizes the state of entrepreneurship education at HEIs in Rwanda in terms of support mechanisms, audiences, aims, contents, teaching and assessment methods. The various characteristics indicated in Figure 5.1 result from both primary and empirical work conducted in the context of this study:

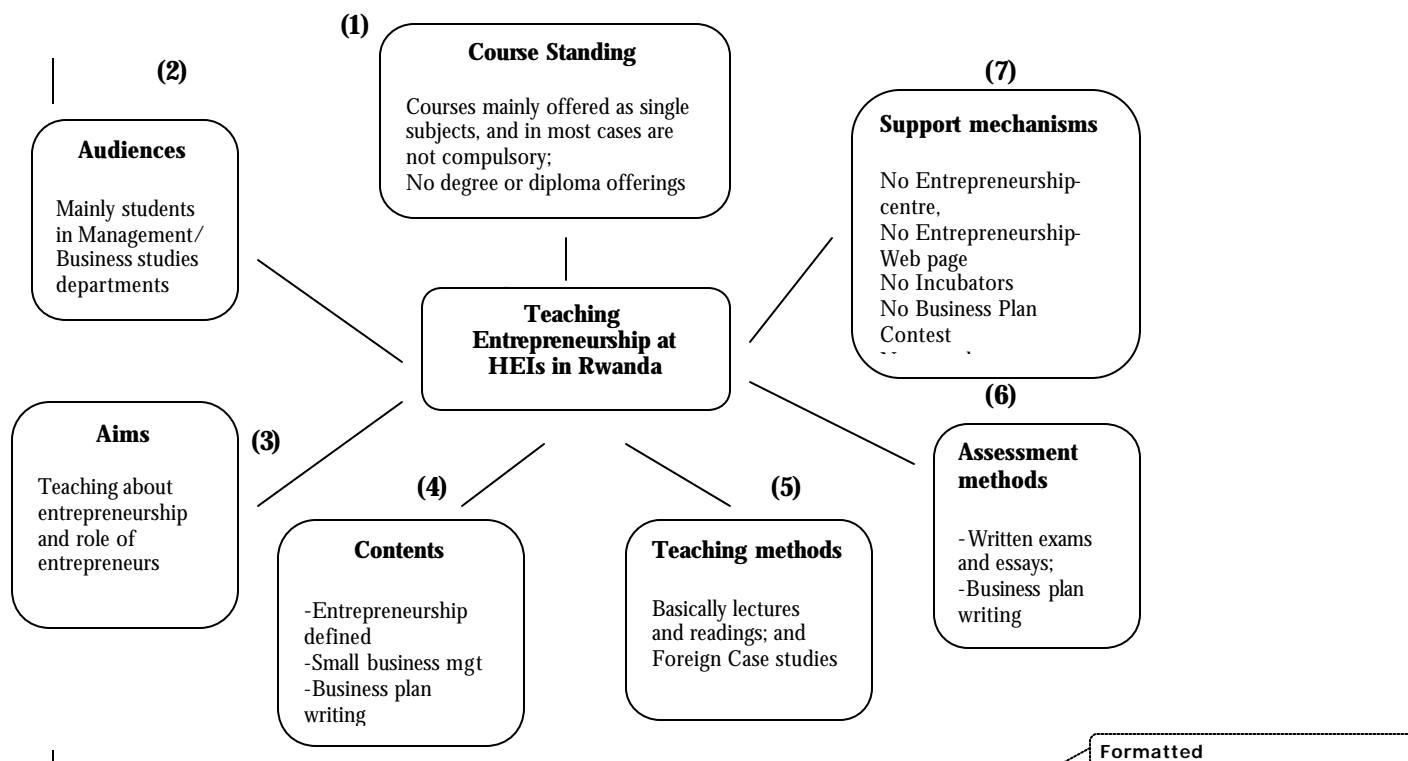


Figure 5.1: Characteristics of entrepreneurship education at HEIs in Rwanda

Generally speaking, the study has achieved its objectives, and it can be concluded that entrepreneurship education at HEIs in Rwanda is not appropriately developed to inculcate entrepreneurial skills, competencies, and attitudes, which in turn will impact on the student inclination towards entrepreneurship as a career choice. Support for this observation and deduction is further strengthened by the limitations to the development

of entrepreneurship education that are drawn from the discussion of findings of this study. The limitations are:

1. The low level of entrepreneurship education provision at HEIs in Rwanda that is translated into a weak standing of entrepreneurship course offering and its limited spread within non-business departments as indicated in text boxes (1) and (2) of Figure 5.1;
2. The lack of support mechanisms to facilitate entrepreneurship teaching and learning at HEIs in Rwanda [see text box (7)];
3. Entrepreneurship learning aims and contents are theoretical-oriented and emphasize less on building skills necessary for new venture creation [see text box (3) and (4)];
4. The use of traditional methods of teaching and assessing entrepreneurship classes that do not involve students to experience entrepreneurship [see text-boxes (5) and (6)].

## **5.7 RECOMMENDATIONS**

In light of the discussions of research findings, and the subsequent conclusions and limitations to entrepreneurship education development pointed out in this study, and considering the exploratory nature of the research questions, the following recommendations will be of a generic nature:

### **5.7.1 A specialized entrepreneurship programme should be developed at HEIs in Rwanda**

As discussed previously, one of the limitations to the development of entrepreneurship education at HEIs in Rwanda is the low level of entrepreneurship provision. In order to be more visible and produce significant impact on students' propensity towards entrepreneurship as a career option, the researcher suggests that specialized entrepreneurship programmes, which focus on the creation of opportunity-driven businesses, be introduced into the education system at Higher Education Institutions in Rwanda. The researcher strongly suggests that three or more compulsory entrepreneurship courses bound together towards a degree or diploma be developed at tertiary institutions. However, the development of entrepreneurship programmes should not be limited to business students, but more attention should be given to students in

other departments or faculties. Given the current economic vision of Rwanda geared towards the development of a knowledge economy, entrepreneurship programmes should receive particular consideration in the Faculties of Science and Technology.

For entrepreneurship programmes to be embedded in the education system, it requires a political response. The researcher foresees the positive role of HEIs in reversing the current trends. Increasing the coverage and awareness of entrepreneurship education, i.e. introducing more entrepreneurship courses and developing certificates, diploma and/or degrees would raise the credibility and the desirability to pursue entrepreneurship.

### **5.7.2 Entrepreneurship education should receive special consideration with regard to funding**

Although entrepreneurship is taught at HEIs in Rwanda, the findings of this study indicate that HEIs are not equipped with the necessary support mechanisms for entrepreneurship education. The Government of Rwanda, development partners in the field of education, the private sector and HEIs themselves should join efforts to raise funds for entrepreneurship education. Business plan competitions, entrepreneurship centres, incubators are effective means to promote an entrepreneurship culture within HEIs and providing necessary funds to these activities would make entrepreneurship education more attractive and respectable for both the academic and the outside world.

### **5.7.3 The traditional learning approaches used at HEIs in Rwanda, should leave more room for experiential learning.**

Since entrepreneurship education is viewed in terms of the transfer of skills and attitudes, competencies required for business creation, entrepreneurship courses offered at HEIs in Rwanda should aim at inculcating skills necessary to see, to foresee, and to exploit market opportunities. In this regard HEIs in Rwanda need to move away from the traditional teaching and assessment methods, which are not believed to foster needed competencies for opportunity identification and venture creation. The researcher recommends the integration of skills building and discovery methods in the teaching of entrepreneurship. In fact, by using teaching methods that are closely associated with reality, students acquire relevant knowledge of entrepreneurship. Pedagogical techniques



that includes idea generation workshops, role-playing, presentations, simulations, problem solving, networking and consultancy are but a few teaching techniques for entrepreneurship education that should be considered at HEIs in Rwanda.

#### **5.7.4 Training of entrepreneurship educators should be a priority for the Ministry of Education**

As mentioned in 4.2.1 very few entrepreneurship lecturers at HEIs in Rwanda have received specific training in entrepreneurship and they lack entrepreneurial experience. However, teaching entrepreneurship requires that lecturers themselves be innovative in their approach to teaching. Generally, changes in the curriculum have to be accompanied by changes in teaching styles. Therefore, there is a need to involve educators in training programmes that can teach them how to teach entrepreneurship in order for them to understand the special demand of entrepreneurship teaching for experiential learning.

### **5.8 RECOMMENDATIONS FOR FURTHER STUDIES**

This situational analysis of entrepreneurship education provides a framework within which strategies to develop entrepreneurship education at higher education institutions in Rwanda may be devised. However, at this point of analysis, additional research needs to be undertaken in order to understand for example the entrepreneurial characteristics of students at HEIs in Rwanda and their educational and learning needs. Knowledge of characteristics, educational and learning needs has important implications for entrepreneurial curriculum and pedagogical design. More research is also needed to evaluate how entrepreneurship education can best be supported given the resource constraints of a developing country such Rwanda.

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APPENDIX 1



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17 June 2004

Dear Participant

**PARTICIPATION IN A RESEARCH STUDY: ENTREPRENEURSHIP EDUCATION AT TETIARY INSTITUTIONS IN RWANDA: A SITUATION ANALYSIS**

The purpose of this letter is to invite you to participate in a research study being conducted through the Department of Management at the University of the Western Cape, Bellville, South Africa.

The underlying theme of the research project is to determine and develop an understanding of the extent to which the Rwandan education system fosters entrepreneurial skills and competencies at tertiary level.

For this study to be undertaken, the researcher is required to interview a number of potential participants from tertiary institutions in Rwanda. This study has a potentially extensive impact of providing useful insights for a range of role-players in Rwanda.

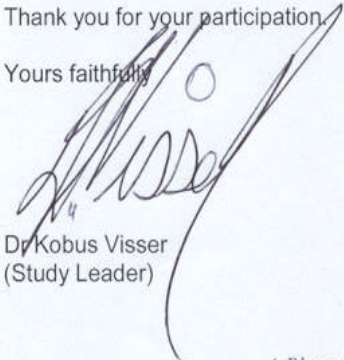
It will be a first study of this nature to investigate the provision of entrepreneurship education in higher education institutions in Rwanda. Therefore, findings from this study would be most useful for policy makers, academics, educational institutions and the public in general.


It would be appreciated if you could complete the enclosed questionnaire, which should take approximately 45 minutes. The data collected will remain anonymous and confidential.

The researcher is registered for a master's degree in the Department of Management at the University of the Western Cape.

Thank you for your participation.

Yours faithfully

  
Dr Kobus Visser  
(Study Leader)

  
Mr Richard Niyonkuru  
(Researcher)

*A Place of Quality. A Place to Grow*

Cover letter Richard

**APPENDIX 2: QUESTIONNAIRE FOR HEADS OF DEPARTMENTS**

You have been identified as someone who could supply the necessary basic information.

We define **entrepreneurship courses as a set of classes taught as a series, which focus on entrepreneurship, new venture management or starting new businesses.** That is, they concentrate on new rather than existing business activity. Small Business management courses concentrate on existing activities.

The survey covers practical courses and those with a more academic content.



Thank you for your help.

Name of this University/Institute.....

The name of your Department.....

Your position within the University/Institute .....

Please read the following statements and circle YES, NO, or DON'T KNOW as appropriate for your department.

- 1. We offer an undergraduate degree in entrepreneurship.  Yes No Don't Know
- 2. We offer a diploma in entrepreneurship.  Yes No Don't Know
- 3. We offer a certificate in entrepreneurship. Yes No Don't Know
- 4. We offer occasional seminars in entrepreneurship. Yes No Don't Know
- 5. Entrepreneurship is covered in one or more existing courses, which focus mainly on another form of business activity Yes No Don't Know
- 6. Entrepreneurship is taught in one or more dedicated courses. Yes No Don't Know

7. Indicate which entrepreneurship courses/small business management course are offered and tick in the appropriate column to indicate in which class it is offered

Name of the course offered	1st Year	2nd Year	3rd Year	4th Year	5th Year
1					
2					
3					
4					
5					
6					
7					
8					

- |   |     |     |            |
|---|-----|-----|------------|
| 8. We organize a business plan competition  | Yes | No  | Don't know |
| 9. We have business incubation facilities for spin-offs firms.  | Yes | No  | Don't know |
| 10. We have mechanisms to provide financial assistance to spin-offs firms.  | Yes | No  | Don't know |
| 12. We have mechanisms to provide advice to spin-offs firms.  | Yes | No  | Don't know |
| 13. We have mechanisms to provide equipment to spin-offs firms.   | Yes | No  | Don't know |
| 14. We have club or Association for students entrepreneurs.   | Yes | No  | Don't know |
| 15. We have an entrepreneurship web-page.   | Yes | No  | Don't know |
| 16. Does your University/Institute have a Centre in Entrepreneurship  | Yes | No  |            |
| 17. Does your Department provide any training for lecturers on working with small business?   |     | Yes | No         |
| 18. Does your Department provide any training for business or community organisations wishing to work with education?   | Yes | No  |            |
| 19. How can education support the development of the awareness and skills necessary for developing an entrepreneurial mindset and skills at your University? Tick all that may apply: |     |     |            |
| <input type="checkbox"/> Make entrepreneurship training as part of a University curriculum,   |     |     |            |
| <input type="checkbox"/> Get entrepreneurs into the classroom,  |     |     |            |
| <input type="checkbox"/> Offer apprenticeships for students to work with experienced entrepreneurs,   |     |     |            |
| <input type="checkbox"/> Implement entrepreneurial training in universities,  |     |     |            |
| <input type="checkbox"/> Introduce a degree in Entrepreneurship,  |     |     |            |
| <input type="checkbox"/> Match entrepreneurial training with public research programmes   |     |     |            |
| <input type="checkbox"/> Other, please specify:   |     |     |            |

**If you answered YES to Question 6 above:**

Please arrange for the principal Lecturer of each course offered in your department in entrepreneurship as defined in Question 7 to fill out the following questionnaire for each entrepreneurship course.

Thank you very much for your kind co-operation.



**5. Teaching/learning methods:** please tick all that apply to this course.

- |   |   |
|---|---|
| <input type="checkbox"/> Lectures   | <input type="checkbox"/> Role-playing   |
| <input type="checkbox"/> Individual projects  | <input type="checkbox"/> Preparation of student business plans                                    |
| <input type="checkbox"/> group projects   | <input type="checkbox"/> Student oral presentations   |
| <input type="checkbox"/> Real case studies  | <input type="checkbox"/> Essays   |
| <input type="checkbox"/> Fictional case studies   | <input type="checkbox"/> Readings (i.e. chapters of books, journal articles but not case studies) |
| <input type="checkbox"/> Local case studies   | <input type="checkbox"/> Course materials available in the Internet/Intranet                      |
| <input type="checkbox"/> Foreign case studies   | <input type="checkbox"/> Written end course exams   |
| (If case studies are used, please indicate the approximate % of in-house produced cases..... %) | <input type="checkbox"/> Oral exams   |
| <input type="checkbox"/> Business simulations   | <input type="checkbox"/> Class participation included as part of overall mark                     |
| <input type="checkbox"/> Multimedia exercises   | <input type="checkbox"/> Links with other entrepreneurial activities in the institution           |
| <input type="checkbox"/> Video cases  | <input type="checkbox"/> Links with other entrepreneurial activity beyond the institution.        |
| <input type="checkbox"/> Guest speakers (e.g., bankers, CAPMER staff)                           |   |
| <input type="checkbox"/> Guest speakers (entrepreneurs)   |   |
| <input type="checkbox"/> Entrepreneurs interviewed by students                                  |   |



6. Does your department offer information on the web regarding entrepreneurship and new venture creation to students?      YES     NO   

7. Do you require web-based assignments as part of your entrepreneurship course?      YES     NO   

**8. About the lecturer in charge of the unit/module/elective:**

Full-time faculty in this institution     Part-time lecturer (please indicate as appropriate)

9. Please circle

- |   |  |     |    |
|---|--|-----|----|
| ? | Has set up own business                                | Yes | No |
| ? | Was/is a manager in new/young business                 | Yes | No |
| ? | Was/is a manager in small business                     | Yes | No |
| ? | Was/is a manager in medium sized or large business     | Yes | No |
| ? | Was/is a manager in the public sector                  | Yes | No |
| ? | Was/is a manager in an enterprise support organisation | Yes | No |

10. Have you attended any entrepreneurship teacher-training course or seminar?    Yes    No


When you have completed all the items of this questionnaires, kindly attach the description of this course, i.e. course aims and contents.

Thank you for your time and willingness to participate.



**APPENDIX 4: OBJETIVES AND CONTENTS OF ENTREPRENEURSHIP /SMALL BUSINESS MANAGEMENT COURSES**

Subject name	Course objectives	Course content	Institution
Entrepreneurship Development	Not provided	<ul style="list-style-type: none"> <li>- Introduction to entrepreneurial mindset</li> <li>- Theories of entrepreneurship</li> <li>- Identification, selection and business plan writing</li> <li>- Building the management team</li> <li>- Legal aspects</li> <li>- Analyzing the market</li> <li>- Pricing of products and services</li> <li>- Marketing/ penetration tactics</li> <li>- Financial statements, ratios, budgeting and cash flow projections</li> <li>- Operation and managing growth of an enterprise</li> <li>- Source of finance</li> <li>- The entrepreneur and the community</li> </ul>	KIST
Small and Medium Enterprise Management	Not provided	<ul style="list-style-type: none"> <li>- Problems of definition of SMEs</li> <li>- Entrepreneurship concepts</li> <li>- Venture creation process</li> <li>- Enterprise Strategies</li> <li>- SMEs promotion</li> </ul>	ULK
Entrepreneurship	<ul style="list-style-type: none"> <li>- Definition of entrepreneurship and entrepreneur</li> <li>- Process of venture creation, explain the business plan and SMEs policies</li> <li>- Raise entrepreneurship awareness</li> </ul>	<ul style="list-style-type: none"> <li>- Elements of entrepreneurship</li> <li>- Venture creation process</li> <li>- Strategies for enterprises</li> <li>- SMEs promotion</li> </ul>	ULK

<b>Subject name</b>	<b>Course objectives</b>	<b>Course content</b>	<b>Institution</b>
Developing entrepreneurial Competencies	<ul style="list-style-type: none"> <li>- Introduce important competencies of entrepreneurs</li> <li>- Reinforce these competencies among the students</li> </ul>	<ul style="list-style-type: none"> <li>- Introduction to entrepreneurship</li> <li>- Factors influencing entrepreneurship</li> <li>- Core competencies of successful entrepreneurs</li> <li>- Success stories from Rwanda and elsewhere</li> </ul>	NUR UNILAK
Promotion of Small and Micro Enterprises	<ul style="list-style-type: none"> <li>- Provide knowledge and practical skills about instruments for micro and small enterprise promotion</li> <li>- Discuss government policy for micro and small enterprise promotion</li> </ul>	<ul style="list-style-type: none"> <li>- Introduction to business plan</li> <li>- Component of a business plan</li> <li>- Market research</li> <li>- Rwanda government policy for micro and small enterprise promotion</li> </ul>	NUR UNILAK
Entrepreneurial environment and informal sector	<ul style="list-style-type: none"> <li>- Expose students to the concepts of entrepreneurship</li> <li>- Discuss the conducive environment to entrepreneurship</li> <li>- Understand the entrepreneur and the informal sector economy</li> </ul> 	<ul style="list-style-type: none"> <li>- The concept and theories of entrepreneurship</li> <li>- Entrepreneurship development</li> <li>- Informal sector and economic growth</li> <li>- Growth of entrepreneurship in the informal sector</li> <li>- Factors affecting entrepreneurship development in Rwanda</li> <li>- Financial and Institutional support</li> </ul>	NUR UNILAK
Business Planning	<ul style="list-style-type: none"> <li>- Strategic planning for an agri-business</li> <li>- Process of agri-business creation</li> <li>- Venture valuation</li> </ul>	<ul style="list-style-type: none"> <li>- The enterprise and its environment</li> <li>- Enterprise Planning</li> <li>- Strategic planning</li> </ul>	NUR
Entrepreneurship and Small business management.	<ul style="list-style-type: none"> <li>- To acquaint the students with the fundamentals of entrepreneurship and establishing and managing small business units.</li> </ul>	<ul style="list-style-type: none"> <li>- Entrepreneurship: meanings, types, qualities</li> <li>- Psychological factors</li> <li>- Factors influencing the birth of entrepreneurs</li> <li>- Entrepreneurship development: government policy</li> <li>- Small enterprises: meaning and importance</li> <li>- Small enterprise creation: Opportunity scanning, business plan preparation</li> <li>- legal formalities</li> <li>- Managing small business</li> <li>-Performance of SMEs in Rwanda</li> </ul>	NUR UNILAK



<b>Subject name</b>	<b>Course objectives</b>	<b>Course content</b>	<b>Institution</b>
Foundations of entrepreneurship and small business management	<ul style="list-style-type: none"> <li>- enhance understanding of the subject</li> <li>- prepare students to understand what it takes to be an entrepreneur</li> <li>- enhancing their abilities to evaluate their entrepreneurial interest, capability, and ability</li> </ul>	<ul style="list-style-type: none"> <li>- Definition of term</li> <li>- Entrepreneurial characteristics</li> <li>- Entrepreneurial awareness</li> <li>- Entrepreneurial competencies</li> <li>- Entrepreneurial opportunities</li> </ul>	KIE
Entrepreneurship	<ul style="list-style-type: none"> <li>- recognize and assess own entrepreneurial potential</li> <li>- understand that to be entrepreneurial involves possession of skills and attitudes</li> <li>- Recognize and apply tools involved in the creation of technology-based venture</li> <li>- Evaluate opportunities, acquire resources, and develop a business plan</li> <li>- Evaluate the business environment</li> </ul>	<ul style="list-style-type: none"> <li>- The entrepreneurial process</li> <li>- Should you be an entrepreneur?</li> <li>- Creating an enterprise team</li> <li>- Evaluating opportunities</li> <li>- Analysis of new venture</li> <li>- Valuation techniques</li> <li>- Intellectual property issues.</li> </ul>	KIE
Business plan	<ul style="list-style-type: none"> <li>- Understand the importance of a business plan</li> <li>- Learn about theoretical and practical details of a business plan</li> <li>- Developing a business plan</li> </ul>	<ul style="list-style-type: none"> <li>- Meaning of BP</li> <li>- Generating a business idea</li> <li>- Identification of a business opportunity</li> <li>- Evaluation of the business opportunity</li> <li>- Component of a BP</li> <li>- Writing a BP.</li> </ul>	KIE
SME Management	<ul style="list-style-type: none"> <li>- Examine the necessary tools for decision making in small and medium enterprises</li> </ul>	<ul style="list-style-type: none"> <li>- SME definitions</li> <li>- Role of SMEs in the economy</li> <li>- Principles of management</li> <li>- Enterprise growth and decision making</li> </ul>	UAAC