Cape Peninsula
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A NEEDS ANALYSIS FOR ENTREPRENEURSHIP EDUCATION IN SELECTED HIGH SCHOOLS IN LIBREVILLE, GABON

by

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DECLARATION

I, **Jenny Georgette Pambault Enombo**, declare that the contents of this thesis represent my own unaided work, and that the thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.

Signed Date

ABSTRACT

This study aimed to identify the need for entrepreneurship education in developing countries, more specifically in Libreville, Gabon.

This research followed a mixed method. Quantitative data were collected by means of closed-ended questionnaires. Qualitative data were collected using individual face-to-face interviews.

A sample of 150 pupils/students, six teachers and three principals from three selected institutions in Libreville was selected. Furthermore, a member of the Ministry of Education of Gabon was interviewed.

The findings indicate that though there is an understanding of entrepreneurship education in Libreville, teaching of the actual subject entrepreneurship is required. The majority of participants agreed that entrepreneurship education should be included in the school curriculum, and that there was need for teachers training.

The lack of entrepreneurship education in schools in Libreville, Gabon, is mainly because an entrepreneurial mindset does not seem to exist. This research is important in the sense that it creates an awareness of entrepreneurship education and business creation in Libreville, which should serve as a major boost to the economy of Gabon.

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- my pastor, mentor, and teacher, Pastor John Anosike, as well as Pastor Ola Anosike – thank you papa and mama for your prayers and encouragement.

DEDICATION

I dedicate this thesis to my parents, Jean Louis Pambo Enombo and Anne Otsoula epouse Pambo Enombo.

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CHAPTER ONE: INTRODUCTION

1.1 Introduction

It is commonly approved that entrepreneurship is a significant force in shaping the changes that take place in the economy (Kelley, Singer & Herrington, 2012). In most developed and developing countries, it has become fashionable to view entrepreneurship and entrepreneurship education as the answer to decaying or declining economic activity (Matlay, 2004:704). Furthermore, Matlay and Westhead (2004:705) agree that entrepreneurship education is viewed as the most operative way to ease the transition of an emergent graduate population from education to work.

A definition of entrepreneurship has been proposed by scientists, academics, experts, and even policy makers since the notion was first established in the early 1930s (Kelley et al., 2012). Karimi, Chizari, Biemans and Mulder (2010:35) state that entrepreneurship has long been designated as a main factor for socioeconomic improvement because it provides job opportunities, offers a diversity of consumer goods and services, and generally increases national success and competitiveness. Entrepreneurship education, on the other hand, can be viewed as an inclusive term referring to those characteristics of the educational process including, as well as general education, the study of technology-based sciences and the acquisition of entrepreneurial skills, attitudes, understanding, and knowledge relating to occupations in various sectors of economic and social life (NERDC, 2004:23).

Although there is a continuing debate regarding whether entrepreneurship education should be offered to school students and whether learners have the maturity and experience to understand the complexities and challenges of the business world (Peterman & Kennedy, 2003:131), according to Fayolle and Klandt (2006), many countries such as Netherlands and Finland (European Commission, 2012:7), Tanzania (Fulgence, 2015:241), Kenya and Uganda (Jimmy, Stephen & Richard, 2014:204) have started promoting entrepreneurship education in schools and colleges. In accordance with this, Karimi et al. (2010:46), conclude that entrepreneurship education, particularly in higher education institutions, has gained considerable significance and credit over the past decade in both developed and developing countries. In Scotland, for instance, the Scottish Executive initiated a programme known as “Determined to Succeed” in 2002. This programme was launched to encourage entrepreneurship education in primary and secondary schools (European Commission, 2006:30). In Spain, the curricular framework for secondary education includes a mini-company programme (Empresa Joven Europea) that clearly addresses entrepreneurship

(European Commission, 2006:24), while in Austria, the Entrepreneur's Skills Certificate was created to encourage entrepreneurship education in secondary schools (European Commission, 2006:33).

In Asia, the Malaysian government established entrepreneurship education and training programmes as part of the Malaysian National Development Plan (Prime Minister of Malaysia, 2010); in China entrepreneurship education has received growing attention from government at various levels (Seikkula-Leino, 2011:69). However, a search on Google Scholar revealed no results for entrepreneurship education in schools in Gabon. Although entrepreneurship is taught at university level, there is still a gap for entrepreneurship education in Gabonese schools, and this provides the rationale for this study.

The current study seeks to conduct a needs analysis of entrepreneurship in Gabon, as the Gabonese education system is in general disarray, with a dropout rate greater than 20% and a repetition rate of about 53% in primary education (Hoppers, 2009).

Over 37% of all children are unsuccessful in their final primary education examinations. At best, only 40% of the candidates are admitted to the baccalaureate examination, the culmination of secondary education. Of those who pass, about 80% are unable to continue to university because they fail the admission examination. Among those who complete tertiary education, only one-third can find work in the fields in which they have been trained (Hoppers, 2009).

The study evaluates the need to introduce entrepreneurship education in Gabonese schools. By empowering people from a younger age using entrepreneurship education, the economy of the country will blossom. Activity Theory has been used in a limited extent in terms of determining the need for entrepreneurship education. This study addresses that theoretical gap. In terms of empirical gap, there are no previously reported studies of a needs analysis pertaining to entrepreneurship education in Gabonese schools.

The objectives of this research are: (1) to determine what factors are constraining the introduction of entrepreneurship education in Gabonese schools, (2) to undertake a needs analysis regarding entrepreneurship education in schools, and (3) to establish the relationship between entrepreneurship education and job creation. To clarify the key concepts, theories and relevant data for this study, secondary sources were utilised. This is a process known as the literature review (Bloomberg & Volpe, 2008:46). The sources of information for the literature review comprise published books, journals, electronic articles, and government publications.

1.2 Contextual background

Libreville, where this study was conducted, is the capital and largest city of Gabon, officially the Gabonese Republic (French: *République gabonaise*), on the west coast of Central Africa, with a population of about half a million people. Compared to other regional capitals, Libreville is a fairly modern city in parts. Colonised by the French, the official language is French. The language of instruction in schools and universities is therefore exclusively in French.

Figure 1-1: Map of Gabon

Source: Gabon Economic potential adapted from Boyfield, 2011.

Currently in Gabon, students have two principal options when entering high school. They either enrol in what is commonly designated general teaching, or in technical teaching. However, entrepreneurship is not offered in either of the streams.

The curriculum of high schools in Gabon (general teaching or technical or practical teaching), does not foster the teaching of entrepreneurship. It is necessary to re-examine the system to give more opportunities to either high school leavers or graduates. Since the study mainly focuses on pupils currently in their final year at school, that is, Grade 12 learners, there is a need to examine the current components of the school curriculum.

Table 1-1: Portion of curricula in Gabonese schools (general and technical teaching)

General teaching	
Options	**Subjects**
1. Terminal A1: Semi-Literary	French – Philosophy – Mathematics – History and Geography – English – Spanish - Sport
2. Terminal A2: Literary	French – Philosophy – Mathematics – History and Geography – English – Spanish – Sport – German, Arabic or Italian
3. Terminal B: Economics	General Economics – French – Philosophy – Mathematics – History and Geography – English – Spanish – Sport
4. Terminal C and Terminal D: Scientific.	Physics – Sciences of Life and Earth – French – Philosophy – Mathematics – History and Geography – English – Sport
Technical teaching	
Commercial Action and Communication	Mathematics, Economics of Enterprises, French, Law, Technical and Commercial skills, English, Physical Education and Sport.
Commercial Action and Administration	French, Philosophy, Economy-Law, Technical Tools of Communication, English and Mathematics
Terminal F: Electricity	Mathematics, Physics, Electricity, Mechanical

Schools in Libreville, especially, following the general teaching stream, have five different options when reaching the last level at school: Terminal A1: Semi-Literary, Terminal A2: Literary, Terminal B: Economics, Terminal C: Scientific, Terminal D: Scientific. It is apparent that no entrepreneurship subjects appear in the curriculum.

The study involved the use of quantitative and qualitative methods in the form of a case study. The case study was based on three high schools in Libreville (two government schools and one private school). The schools are mainly located in the urban area of Libreville. One of the schools was chosen because it offers both streams: technical and general teaching. The other two were chosen for their accessibility and availability to participate in the study.

1.3 Literature review

It is important that learners, from a tender age, understand what entrepreneurship is all about. This way, they are more inclined to start their own businesses and create employment, either as soon as they obtain the requisite knowledge or at a later stage (Kourilsky & Walstad, 1998).

For entrepreneurship to be part of the average Gabonese young person's way of thinking, it should be taught in high schools. In agreement, Ejiogu and Nwajiuba (2012:10), state that one of the ways of developing a culture of entrepreneurial thinking is by incorporating entrepreneurship into educational organisations. Although some authors and researchers are still unsure of what entrepreneurship education really is and how it can be taught (Holmgren & From, 2005; Pittaway & Cope, 2007), others agree that it has become an theoretical and teaching field (Fayolle & Gailly, 2008:569); thus, many universities and even schools around the world have been teaching entrepreneurship education for years. Most of the empirical studies surveyed indicated that entrepreneurship can be taught, or at least stimulated, by entrepreneurship education (Fayolle & Gailly, 2008:569). It appears that in the United States entrepreneurship is taught at all levels of education (Ejiogu & Nwajiuba, 2012:10). Mensch and van Dijk (2015:1) contend that entrepreneurship education is being implemented in Swedish schools. According to Herrington, Kew, Simrie and Turton (2011:6), the Entrepreneurial Framework Conditions (EFCs) most likely to have an influence on apparent sustainability are education and entrepreneurship education.

1.3.1 Overview of unemployment in Gabon

Unemployment is not a problem faced by Gabon alone. Many other countries in the world are experiencing the same issues. In Jordan, for instance, the reasons for youth unemployment include lack of career guidance for youth, absence of job opportunities after graduation, trouble in finding jobs well matched with qualifications, and the difference between graduates' skills and those needed by companies (Goussous, 2009:5). In North America, the growing capital intensity of production, labour market guidelines, and substantial welfare benefits are some of the factors that influence youth unemployment (Nwuke, 2002:8).

Gabon is among the richest nations in Africa in terms of per capita gross national income, reflecting its modest population (1.5 million) and important oil revenues (Le Gabon.org, 2013). The Direction Générale des Statistiques du Gabon (2010), reported that unemployment rate in Gabon grew to 16 percent in 2010 from 14.80 percent in 2005 (see

Figure 1-2). Job creation has not kept abreast with economic progress. In 2012, the national unemployment percentage was 20 percent (IMF, 2013:7). The International Monetary Fund (IMF, 2013:8) confirms that employment has been fundamentally sustained by the public sector.

Figure 1-2: Gabon unemployment rate

Source: Direction Générale des Statistiques du Gabon, 2010

1.3.2 Overview of youth unemployment in Gabon/ Overview of the Gabonese economy

Awogbenle and Iwuamadi (2010:831) attest that the level of unemployment is a reflection of the state of a nation's economy. Although Gabon has a per capita income four times higher than that of most sub-Saharan African nations, a significant number of the population remain poor. Youth unemployment is proliferating, regardless of the country's vast natural resources.

A recent report of the International Monetary Fund (IMF) highlighted that unemployment and poverty in Gabon persist, notwithstanding the profusion of natural resources, on which the country is still very reliant (Ndiho, 2013). However, since Gabon hopes to become an emerging economy by 2035, as an immediate strategy the government encourages domestic and foreign private investments.

Gabon's business environment is poor (144 out of 185) among upper middle-income countries, according to the 2014 World Bank report (World Bank, 2014:8). The high level of unemployment and poor business environment echo a skills mismatch and poor business environment. Less than eight percent of students have a technical education, leading to a shortage of these types of employees in the labour market (IMF, 2013:7).

1.3.3 The concept of entrepreneurship

Originally from the French word *entreprendre* (Bolton & Thompson, 2003:3), the term refers to someone who embarks on an endeavour and intends to make it grow (Bolton & Thompson, 2003:3). Created by French economist Richard Cantillon, the word 'entrepreneur' first appeared in the eighteenth century (Oseifuah, 2010:164). On the other hand, it is not easy to define entrepreneurship (Davey, Plewa & Struwig, 2011:336), Nicolaides (2011:1043) defines entrepreneurship as the process of identifying and developing a business opportunity and turning it into a possibly successful venture in an uneven location.

1.3.4 Contribution of entrepreneurship to the development of an economy

Besides financial aid, there is the need to invest in entrepreneurship education and training programmes (Nafukho, Graham & Muyia, 2009:40). Gavron, Cowling, Holtham and Westall (1998) observed that in the USA, periods of economic growth tended to correlate directly with an increase in the number of new business enterprises. In the case of Europe, Garavan and O'Cinneide (1994) observed that since the 1970s, small businesses initiated by entrepreneurs had become a net initiator of jobs and wealth creation. Furthermore, according to the World Bank report (2006:3) the majority of people who escape from poverty do so by starting their own businesses or finding work in existing ones. This means that practical learning and teaching are vital in the education system for a learner to be successful in his/her endeavour. The earlier in childhood the foundation for the development of entrepreneurship skills is laid, the earlier the child begins to acquire the requisite skills for job creation and self-employment.

1.3.5 Entrepreneurship education

Entrepreneurship education, as defined by the Centre for Entrepreneurial Leadership Clearinghouse, is the method by which individuals acquire skills to identify opportunities often missed by others (Ahmad, 2013).

Generally speaking, entrepreneurship education can be viewed as the knowledge and skills taught to an individual, to create in him/her the desire to own a business. Alberti, Sciascia and Poli (2004) define it as a way of conveying entrepreneurial skills and knowledge which will enable individuals to create jobs. In a world where poverty and unemployment are endemic, it is crucial to have entrepreneurship education. It should be an integral part of general education, aimed at preparing individuals for self-employment, occupational fields, and effective participation in the world of work. Entrepreneurship is also seen as a method of reducing poverty.

Entrepreneurship education can be viewed as a complete term, referring to those aspects of the educational process involving, in addition to general education, the study of technology-related sciences and the acquisition of entrepreneurial skills, attitudes, understanding, and knowledge relating to occupations in various sectors of economic and social life (NERDC, 2004:23).

In the United States, entrepreneurship education is taught at primary, secondary and tertiary levels of education (Ejiogu & Nwajiuba 2012:10). As economic growth increasingly relies on entrepreneurship as its driving force, entrepreneurship education in particular can open access paths to socioeconomic openings for the youth (Kourilsky & Esfandiari, 1997:205). Duval-Couetil (2013:394) argues that entrepreneurship education programmes are increasingly being established and expanded in an effort to equip students with the knowledge and competency necessary to create economic value and jobs. According to Kafui Aheto (2012), the world at large, including governments, educational institutions and corporate bodies, sees the need for implementing entrepreneurship education in their programmes.

Entrepreneurship education in Gabonese schools should not just be implemented. It has to be an initiated process. Pupils, principally, and all the stakeholders in the education system have to be consulted to establish if there is a need for entrepreneurship education in schools.

1.4 Needs analysis

When discussing needs analysis, Coetzee, Botha, Kiley and Truman (2007) refer to education, training and development needs analysis. According to them, needs analysis or needs assessment is regarded as crucial to the planning, design and delivery of any initiative. They add that it is the systematic collection and evaluation of information to find the

gaps in the existing competency levels, skills, knowledge and attitude of a specific group. In the present study, school pupils of selected schools in Libreville are the target group.

A needs analysis can either be proactive or reactive (Blanchard & Thacker, 2004). A reactive needs analysis focuses on the present. It identifies a current performance problem that should be immediately addressed. The reactive needs analysis is more suited to the current research because the current performance of high school pupils in Libreville is to be analysed with regard to their current training to determine whether there is a need for entrepreneurship education in schools. It then becomes crucial to look at needs assessment for training. According to Horng and Lin (2013:61) training needs assessment outlines the reach of training, ensuring that training is in line with the objectives of the course.

Botha and Coetzee (2007:83) state that a needs analysis aims to involve main stakeholders and meet their requirements. In this study, the main stakeholders are pupils, teachers, principals, and to a larger extent, government officials in charge of education. Botha and Coetzee (2007) further contend that a needs analysis identifies the following:

- The gap between desired performance and current performance.
- The cause of the gap.
- The specific target group.

The desired performance is the implementation of entrepreneurship education in schools in Libreville, Gabon, in order to create jobs and as a result eradicate poverty or simply unemployment. Since through education one can solve the problem of unemployment by gaining entrepreneurial skills (Gorman, Hanlon & King, 1997), it is vital to redesign school curricula. The current state of entrepreneurship education is that the subject is not yet taught in Gabonese schools, and no basics of entrepreneurship education are taught in sub-Saharan Africa (Kafui Aheto, 2012). The cause of the gap is yet to be established and will form a major component of the study. The specific target group comprises high school pupils in Libreville.

1.4.1 Methods of needs analysis

Botha and Coetzee (2007:102) emphasise that various methods can be used to gather information in an organisation. For them, the most common methods include questionnaires, observation, skills and knowledge tests, personal development plans, performance appraisal data and critical incidents. However for the current study, the researcher only employed questionnaires, interviews and observation, which, according to the HR and Industry Report

(ASTD, 2007) are regarded as important methods for identifying education, training and development (ETD) needs in organisations, along with performance appraisal data.

1.5 Background to the problem

Entrepreneurship is the individual's effort towards starting a business and taking risks to make money, using the skills acquired through education (Arogundade, 2011:26). The individual in this instance is the entrepreneur. According to Cheng, Chan and Mahmood (2009:557), it seems that personality dimensions, or in other words, personal traits, are essential factors in determining whether a person could become an entrepreneur. Hence it might be a challenge to teach someone to become an entrepreneur. However, with entrepreneurship education, some researchers, such as Ronstadt (1987), Katz (2003) and Robinson and Hayes (1991), have shown that it helps create (for those who never thought they could be entrepreneurs) and develop (for those who think they are entrepreneurs but need a directive hand) the entrepreneurial spirit in a young graduate. A study conducted by Waldmann (1997) indicated that entrepreneurship education at high school level had a great impact on the number of students who seriously considered starting a business after graduation.

In the 1980s, most of the governments in the European Community supported entrepreneurship programmes for young people. For instance, an appreciable number of entrepreneurship programmes were developed in the United Kingdom in the 1980s with the support of both public and private organisations (Erkkilä, 1996:312) and the number of entrepreneurship programmes continues to grow in Europe (Fayolle, Gailly & Lassas-Clerc, 2006:715). Today, entrepreneurship education is well established throughout much of Europe at university level and in secondary schools.

According to Bawuah, Buame and Hinson (2006:6), the literature recognises the importance of entrepreneurs in society as they add value to the economy through job creation. However, despite the apparent importance of entrepreneurs, sub-Saharan Africa has still not been able to imitate the strategies (Bawuah et al., 2006:6). There has been a sustained examination of entrepreneurship education in Asia and Latin America, with a paucity of data on sub-Saharan Africa and Africa at large. This has led the researcher to do a needs analysis of entrepreneurship education in high schools in Libreville, Gabon.

1.6 Statement of the problem

It has become more and more difficult for young Gabonese people to find employment. As a matter of fact, the higher their education, the more they struggle to find work, owing to a skills mismatch (Goussous, 2009:5). Despite the explosive growth of entrepreneurship education, Gabon has still not implemented the programme in high schools. Therefore it is only at a later stage (after completion of university studies, while looking for employment and when they are confronted by unemployment) that young people consider entrepreneurship. For over 50 years the economy of the country has been sustained by oil and other natural resources such as manganese and uranium (Ndiho, 2013). Poverty and unemployment levels are high and the most affected remain the youth. Nowadays it is believed that entrepreneurship is the remedy for unemployment. However, entrepreneurship education programmes are not being implemented at high school level; therefore, learners are not being trained in the area of entrepreneurship at high school and at a sufficiently young age.

1.7 Research question

What are the needs that should be addressed so that entrepreneurship education in high schools in Libreville can be initiated?

1.7.1 Research sub-questions

- Why is there a lack of entrepreneurship education in Libreville schools?
- Is there a need for entrepreneurship education in Libreville?
- What are the needs of high schools in Libreville regarding entrepreneurship education and what is the relationship between entrepreneurship education in schools and job creation?

1.7.2 Aim of the research

The aim of the study was to determine if there is a need for entrepreneurship education in high schools in Gabon.

1.8 Objectives of the study

The objectives of this study were to:

- determine what factors (at micro, meso and macro levels) are constraining the implementation of entrepreneurship education in Gabon schools;
- undertake a needs analysis regarding entrepreneurship education in schools in Gabon; and
- establish the relationship between entrepreneurship education in schools and potential job creation.

1.8.1 Specific objectives

The specific objectives of the study were to:

- define the role of teachers, principals and the Ministry of Education in the implementation of entrepreneurship education in schools;
- identify whether or not learners would be able to apply their knowledge of entrepreneurship education; and
- establish the role of each stakeholder regarding entrepreneurship education and job creation in Gabon.

1.9 Significance of the study

Research into entrepreneurship is very important as it tends to address the issues of unemployment and poverty. In Gabon, lots of efforts have to be made in order to eradicate youth unemployment and poverty, and improve the economy of the country. For that to be achieved there is a need for the government to provide training programmes in entrepreneurship to learners. With the appropriate training, graduates will have the additional option to start their own businesses. This may not only solve the problem of youth unemployment and poverty but will also assist in improving the Gabonese economy.

1.10 Theoretical framework

This paper used Activity Theory to discuss the findings as it is a proposed tool for any activity where a major innovation is about to take place (Karasavvidis, 2008). In the case of this study, entrepreneurship in school is indeed a major innovation. In this study, Activity Theory addresses each element, namely subject (teachers), tools (books, technology), object (entrepreneurship education) and outcome (application of entrepreneurship education theory), division of labour (the role of each stakeholder), community (all stakeholders in education) and rules (norms governing the implementation of entrepreneurship education in school) (Hassan, 2014:392). The theoretical framework is presented below.

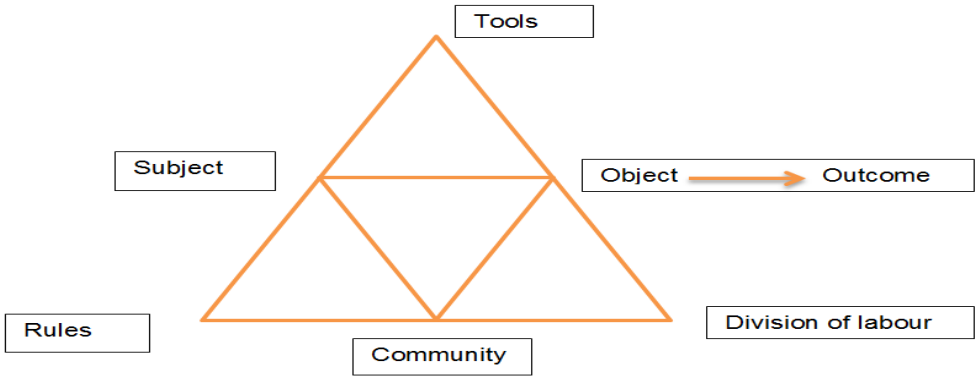

Figure 1-3: The main elements of Activity Theory. Engeström's Expanded Activity Theory Model (adapted from Hashim & Jones, 2007)

1.11 Research methodology

Marczyk, DeMatteo and Festinger (2005:17) state that there are two broad categories of research: qualitative and quantitative. Qualitative research involves studies that do not attempt to quantify their results through statistical summary or analysis. Qualitative studies typically involve interviews and observations without formal measurement. A case study, which is an in-depth examination of one person, is a form of qualitative research. In the same vein, Struwig and Stead (2001:12) describe qualitative research as an enquiry process of understanding, where a researcher develops a complex holistic picture, does an analysis of words, reports detailed views of informants, and conducts the research study in a natural setting.

The qualitative method was used to obtain accurate information. Because this method is usually valuable in providing good descriptions of complex phenomena, it was believed to be valuable for this study. Since the objective of the study was to identify and analyse the need for entrepreneurship in Gabonese schools, interviews with principals were relevant.

1.11.1 Quantitative study

Leedy and Ormrod (2004:185) point out that a questionnaire allows participants to respond to questions with the assurance that their responses will be anonymous, allowing them to be more truthful than they might otherwise be. Questionnaire surveys are regarded as a commonly used method to gather data about the population (Clark, Riley, Wilkie & Wood, 1998:75). A well-structured questionnaire with both open and closed-ended questions

(quantitative) was used, as well as structured interviews (qualitative). The quantitative method approach was used to determine or quantify the number of students and lecturers from the selected high schools.

Likert questionnaires were used to measure learners' attitudes to and opinions of the current curricula in schools and how effective they thought they were regarding job orientation, poverty solution and economic growth, and also to ascertain their thoughts on entrepreneurship.

Questionnaires were designed with a five-point scale, from 'strongly agree' to 'strongly disagree'.

1.11.2 Qualitative study

In defining the qualitative approach, Creswell (2013:19) says that the objective of the researcher is to find the significance of a phenomenon from the view of participants. In the case of this study, the researcher identified a group of Grade 12 learners studying in the same country, some of their teachers and principals, and an active member of the Ministry of Education. Some of the characteristics of qualitative research as listed by Creswell (2013:175) and used in this study are, natural setting, researcher as key instrument, numerous sources of data, inductive data analysis, participants' meanings, and emergent design.

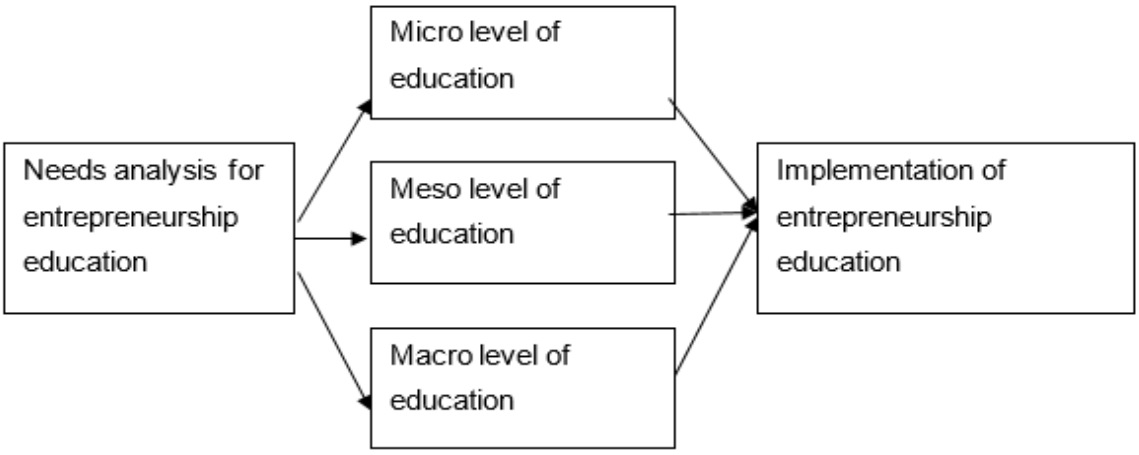

Figure 1-4: Framework of needs analysis for entrepreneurship education in schools

1.11.3 Population

According to Marczyk et al. (2005:18), a study population refers to all individuals of interest to the researcher. The research population in this study comprised teachers, pupils, and principals from all three selected high schools, and a member of the Ministry of Education.

1.11.4 Sampling and size

A sample is a proportion drawn from a targeted population (De Vos, Strydom, Fouché, & Delport, 2009:192). The sample size for this research was two teachers drawn from School A, School B and School C; 50 pupils from the same schools, the principal of each school, and a member of the Ministry of Education in Gabon. This is clearly presented in the table below:

Primary data sources were collected from pupils aged above 17 years, teachers and principals from the three different high schools during this study.

Table 1-2: Distribution of respondents for the three selected high schools

	School 1	School 2	School 3
Pupils	50	50	50
Teachers	2	2	2
Principals	1	1	1
Member of the Ministry of Education in Gabon	1		
Total participants	160		

1.11.5 Methods

Bryman (2004) defines a research method as a procedure put in place to collect data.

For the purpose of collecting data for this study, questionnaires and structured interviews were used.

1.11.6.1 Questionnaires

According to Kothari (2004:100), collecting data through questionnaires is quite common. Therefore the researcher used this method as well to collect data.

1.11.6.2 Structured interviews

For the purpose of this study, structured interviews were used with an interview guide as support. According to Qu and Dumay (2011:246), this is “the most common of all qualitative research”; therefore this researcher deemed it suitable to elicit the best information from teachers, principals and the official from the Ministry of Education.

1.11.7 Primary data sources

Primary data sources were collected from pupils aged above 17 years, from teachers, from principals at three different high schools, and from a member of the Ministry of Education during this study. The data collection instrument for eliciting information from pupils was a questionnaire. Teachers, principals and the Ministry of Education official were interviewed. Therefore mixed-methods research was used in this study.

1.11.8 Secondary data sources

Secondary data are data collected by another researcher and available for use (Kothari, 2004:111). Secondary data regarding entrepreneurship included research articles, the Internet, reports prepared by foreign governments, economists and/or universities.

1.12 Analysis of data

After the quantitative data were submitted to a qualified statistician, he provided a report in an Excel spreadsheet. The report presented a frequency distribution of responses according to school as well as cumulative count, percentage, and cumulative percentage. Further statistical analysis was done by the researcher using the provided report. Microsoft Excel was then used to analyse the quantitative data. The software enables data to be described and summarised using descriptive statistics, tables, barcharts, and other graphic presentations. Thus, all the questionnaires were analysed using Microsoft Excel. For the qualitative data, an online Wordle generator was used to analyse the written transcript. Since the interviews were recorded, the researcher combined the notes taken while conducting the interviews with the recorded ones and put them all on paper. The content of the paper was then entered into the Wordle generator. The qualitative data represented by interview questions were all analysed using Wordle.

1.13 Definition of terms

1. Entrepreneurship: The word ‘entrepreneurship’ literally means, “to take or carry between”, in the sense of an economic transaction; to be a market-maker. It does not literally convey the notion of innovation that we commonly associate with the term (Goldsmith, 2004). Following the most prevalent view, in this thesis entrepreneurship is defined as an individual’s seeing an opportunity, exploiting it and bringing about change in the community by creating employment and uplifting the economy.

2. Entrepreneurship education: Entrepreneurship education, as defined by the Centre for Entrepreneurial Leadership Clearinghouse, is “the process of providing individuals with the concepts and skills to recognise opportunities that others have overlooked, and to have the insight, self-esteem and knowledge to act where others have hesitated”. Entrepreneurship education can be viewed as a comprehensive term referring to those aspects of the educational process involving, in addition to general education, the study of technology-related sciences and the acquisition of entrepreneurial skills, attitudes, understanding, and knowledge relating to occupations in various sectors of economic and social life (NERDC, 2004:23).

3. Entrepreneur: Wagner (2004:4) defines nascent entrepreneurs as those who are about to start a career as self-employed individuals or are ready to switch from employment to self-employment status.

4. Needs analysis: Titcomb (2000) defines need analysis as the process of identifying and evaluating needs in a community or other defined population of people.

1.14 Summary

This chapter covered the main elements of the study. Each component was objectively presented and elucidated throughout the study. In this chapter, an introduction to the thesis topic was given, as well as an explanation of the background, objectives, and purpose of the study, and the research questions.

The study consists of six chapters and the next five chapters are summarised in the table below:

Table 1-3: Chapter outline

Chapters	Chapter outline
Chapter Two	Includes a comprehensive literature review of entrepreneurship education worldwide.
Chapter Three	This chapter deals with research methodology. In other words, the research design, procedure and the methods used to collect and analyse data are revealed in this chapter.
Chapter Four	Here, the research findings are presented following the Activity Theory framework.
Chapter Five	This chapter discusses and analyses the findings. This was done by comparing existing results against those in previous literature.
Chapter Six	The chapter includes conclusions and recommendations of the research while responding to the research question and objective.

The next chapter comprises a literature review on entrepreneurship education. The objectives as well as the key words of the study are elaborated on.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This review of literature is based on the framework presented in Figure 1-3. This researcher highlights the factors constraining the implementation of entrepreneurship education in schools. These factors are identified at the micro, meso and macro level of education. Hirsch (2003), in addressing the management of schools, identifies three system levels: micro, meso and macro levels. The micro level refers to the learners, their willingness, ability to learn and the learning environment. The school management, which includes the teachers, principal and other stakeholders involved in the school organisation comprises the meso level. Lastly, the macro level is associated with the government, but most specifically the Ministry of Education, as this department is directly involved in educational reforms and decision taking.

To objectively analyse the possible challenges of implementing entrepreneurship education in Gabon, these same challenges are analysed globally. The researcher also determines, based on previous literature, whether there is a relationship between entrepreneurship education and job creation.

Factors that enable the implementation of entrepreneurship education in some parts of the world and the benefits accruing from entrepreneurship are evaluated. Similarly, the relationship between entrepreneurship education in schools and job creation in other countries is closely examined. The current curriculum in schools is assessed in terms of its relevance to preparing pupils for job creation or job seeking. At the end of the literature review, it is hoped that the role and importance of entrepreneurship education in schools will be understood.

In their discussion of enterprise education, Birdthistle, Hynes and Fleming, (2007:265) maintain it is a process that engages different stakeholders who play an active role in the implementation and assimilation of the programme. They identify three main stakeholders – students, teachers and the Ministry of Education. While enterprise education trains graduates by helping them develop the necessary skills to act on previously identified needs in society (QAA, 2012), entrepreneurship education specifically focuses on the necessary skills and knowledge to set up, develop and grow a new venture. However, the stakeholders involved in enterprise education are the same as those involved in entrepreneurship education, as they share the same common denominator: education. With regard to this, in the following sections this researcher develops the role of each stakeholder.

2.2 Factors at micro level constraining the implementation of entrepreneurship education (EE) in schools

The micro level refers to the pupils who are directly concerned with the problem addressed in this study, yet they are at the bottom of the pyramid in terms of decision making regarding education, and to a larger extent, entrepreneurship education.

Researchers have been debating entrepreneurship education for some time (Prodromu, 2009:3) regarding whether entrepreneurship education should be offered to learners at secondary schools and whether they would be able to cope in the business world using the skills and knowledge acquired throughout the entrepreneurship education programme (Lope Pihie & Bagheri, 2010:352). Students and learners are trained as preparation to enter the business world according to their areas of study. However, whether they will be employees or employers, or rather entrepreneurs, after graduation will be determined by their intentions (Kadir, Kamarudin & Salim, 2010:20). Kadir et al. add that many studies on students' intention to become entrepreneurs have been conducted. In China for instance, according to Turker and Sönmez Selçuk (2008:145), a number of studies conducted to identify students' intentions regarding entrepreneurship, revealed that students intend to become entrepreneurs Singapore is dependent on their family background and personalities. Another study conducted by Indarti, Rostiani and Nastiti (2010:143) on Asian students entrepreneurial intentions revealed that student's intentions varied from one country to another. Added to the student intention to become entrepreneurs, personality traits is also very important when it comes to entrepreneurship. Having said this, it is crucial to look at personality traits of entrepreneurs in general, find out whether Gabonese learners have the drive for entrepreneurship education as this could be a reason for the non-existence of entrepreneurship education in Gabonese schools.

2.2.1 Personality traits for entrepreneurs

According to Zhao, Seibert and Lumpkin (2010:382), interest in the role of personality in entrepreneurship has recently re-emerged. Raposo, Do Paço and Ferreira (2008) established that individuals who experience a greater propensity for start-up creations seem to possess more self-confidence and leadership capacity. This therefore refers to the personality traits of an individual. When an individual is exposed to risk taking, his or her decision to take the risk or not will be determined mostly by his/her personality, and/or the fact that he/she is eager to achieve something or not.

In examining the conceptual framework provided by McClelland, which includes the need for affiliation, power and achievement, it appears that the need for achievement (N-Ach) is an important trait for entrepreneurs or even aspiring ones (Carsrud & Brännback, 2011:13). A number of researchers (McClelland, 1961, 1987; Hermans, 1970; Fineman, 1977) have attempted to explain the need for achievement. One of the latest attempts, by Zeffane (2013:79), presents the need for achievement as the desire that pushes an individual to attain considerable heights.

The need for achievement also refers to a tendency to choose and persist at activities that average people will avoid because they hold a moderate chance of success; however, such activities provide a maximum opportunity for personal achievement and satisfaction. Obviously, the maximum opportunity for personal achievement satisfaction will only be perceived by an individual with a need for achievement. This applies to entrepreneurs as well, because, as defined by Cambridge Dictionaires Online (2015), the entrepreneur is an individual who embarks on a new venture where he perceives an opportunity. Therefore, the entrepreneur will rather invest in what the average person is unwilling to invest in for fear of failure. Obviously, once such individuals succeed, they are satisfied, and the more they are satisfied, the more they want to take further risks. Although McClelland was the first to promote the link between the need for achievement (N-Ach) as a personal trait and entrepreneurial activity (McClelland, 1961), Liñán, Rodríguez-Cohard and Rueda-Cantuche (2011:197) agree that there is indeed a considerable link between the two.

DePillis and Reardon (2007:383) point out two other personality traits, namely, risk and ambiguity tolerance, and locus of control and personal efficacy. As discussed above, the more the individual takes risks, the more satisfied he becomes. This is a characteristic that perfectly defines the entrepreneur. According to Schjoedt and Shaver (2013:713), locus of control is a significant characteristic in work fulfilment. It is a psychological concept that refers to the fact that people strongly believe that without their input into situations that occur in their lives, things will never be better. On the other hand, when discussing a model for entrepreneurial intention, Ferreira, Raposo, Rodrigues, Dinis and Do Paço (2012:427) list three more personality traits that they call “psychological characteristics”: propensity to take risks, self-esteem and innovativeness. Although risk-taking is often listed as an entrepreneurial characteristic, Ferreira et al. (2012: 428) agree that it has been proved that small business owners or entrepreneurs lack this characteristic. According to Laguna (2013:254), self-esteem is not only important for business but also for any situation in life. A person with low self-esteem will hardly start a business. For Ferreira et al. (2012:427), innovativeness is a very important entrepreneurial characteristic and a powerful tool for

entrepreneurship. It is important to develop these characteristics in learners to, as stated by Heinonen (2007), deal with current situations and yet welcome opportunities.

Zhao et al. (2010) stipulate that apart from personality traits, demographic variables can also be associated with entrepreneurial activity. These include gender, origin, religion, level of studies, labour experience, etc.

According to Giacomin, Janssen, Pruett, Shinnar, Llopis and Toney (2011:220), entrepreneurial disposition and intentions differ by country and region; however students across countries are motivated and/or discouraged by almost similar variables. They add that cultural differences should be taken into consideration when developing entrepreneurship education programmes.

In their investigation into whether entrepreneurial programmes in schools promote positive attitudes among pupils, Johansen et al. (2012:113) agree that for pupils to reach the stage where they choose entrepreneurship as a career, they must have, at the early stage of their lives, been exposed to entrepreneurs. In other words, the earlier a person develops his or her entrepreneurial intention, be it by socialising or simply being part of a family of entrepreneurs, the more chances that person has to become an entrepreneur.

Attitudes and intentions among learners can be changed or improved either for better or worse. If entrepreneurship is to be implemented, a proper approach in terms of training and teaching strategies should be taken into consideration (Kuratko, 2005:579). That implies the direct involvement of educators, that is, teachers and principals.

2.3 Factors at meso level constraining the implementation of entrepreneurship education (EE) in schools

The meso level the researcher refers to comprises the teachers and principal, without whom the transmission of information could be a challenge. Teachers are the direct vehicles through whom the educational objectives are transmitted to students. The responsibility of the school principals is to manage teachers and students in order to reach the educational objectives of the school (Osim, Uchendu & Mbon, 2012:661). It has been long debated and finally largely agreed among researchers that entrepreneurship education should no longer just be an extra-curricular activity, but instead should be embedded in the curricula across all educational levels and types (Hatak & Reiner, 2011:3). The researchers acknowledge that if entrepreneurship education is to be integrated in the school curricula, several changes need to be made. One of those changes include teaching methods (greater use of experiential

learning and a stronger moderation focus applied by teachers, so that students become more independent and take the initiative regarding their education) are required as they are the vehicles for transmitting information to pupils. However, teachers and educators also need the opportunity to acquire the knowledge, skills and attitudes required to include entrepreneurship education and enable entrepreneurial learning (European Commission, 2013:3).

If entrepreneurship education is to be implemented in schools, teachers are directly implicated, as Ruskovaara and Pihkala (2013:204) contend. Since there are no clear-cut pedagogical guidelines for entrepreneurship education, teachers are largely responsible for the integration of entrepreneurship education into their teaching and for implementing the best and most useful practices. However, although there is a lack of pedagogical guidelines for entrepreneurship education, teachers can still make use of innovation and creativity to make the best of their entrepreneurship classes. But how will they teach something they have not really been exposed to? After all, teachers are the main vehicles for entrepreneurship education in schools (Ruskovaara, Pihkala, Seikkula-Leino & Järvinen, 2015). Perhaps this is also a call to first send teachers for training so they can equip themselves with pedagogical knowledge on entrepreneurship education as suggested by Kadir, Salim and Kamarudin (2012:2170). Kadir et al. (2012) add that many ways can be used to transmit knowledge of entrepreneurship education, depending on the objective; of three objectives identified and three ways of offering entrepreneurship education given, two of each are presented and later discussed in this section:

- If the aim is to offer an understanding of entrepreneurship, the practical way is to use public channels such as media and seminars to transmit the information. These methods will not only benefit pupils, but the community or country at large. For a start, since pupils and teachers are mainly concerned here, lecturers should constitute the appropriate method.
- If the objective is to arm learners with business capabilities directly applicable in the workplace, the best way is the use of means such as “industrial training”. This way will perfectly suit employees and develop their ability to create and innovate. This researcher believes that this would be a suitable way for teachers to awake or develop their entrepreneurial skills as they first need to be equipped before they can empower their learners. In other words, teachers will be exposed to entrepreneurship as a group, gathering information and finding ways to teach their learners.
- In case the objective is to train individuals to perform as entrepreneurs, the best way would be to expose learners to the practical side of business. In other words,

learners must act as entrepreneurs by identifying a business opportunity, developing a business, and running it. This is a method that teachers can use to teach school learners how to act as entrepreneurs. This researcher believes that schools can be used for experimentation. After the theoretical side of the learning process, the practical side will be engaged with learners as entrepreneurs.

These are some useful ways to increase knowledge of entrepreneurship education; however they are not the only ones. In Norway, for instance, when identifying strategies to improve entrepreneurship education in schools, the ministries of Education and Research, Business and Industry, and Local Government and Regional Development, financially supported a company that had the mission and vision to empower young Norwegians through entrepreneurship (Johansen et al., 2012:113). As a result, more than 100 000 children learned a great deal about entrepreneurship (Johansen & Schanke, 2013). The point is that it might be a considerable challenge to train teachers in the field of entrepreneurship education and expect them to transmit the knowledge effectively as the process may seem long. Even if teachers are keen to learn and teach entrepreneurship education, few tools are available to help them, according to Seikkula-Leino et al. (2010). One of the solutions to this challenge could be for schools to work closely with an already established company that has as its mission to empower learners with entrepreneurial skills and even take them through the practical part of entrepreneurial training. According to Gibb (1996), teachers face a challenge when teaching entrepreneurship because they only teach the know-how, which is more theoretical than practical. The teachers that are able to implement practice are the ones with relevant experience and knowledge in entrepreneurship, as contended by Prodromou (2009:19). If teachers with less experience in and knowledge of entrepreneurship do manage to teach, learners will have few or none of the skills required to become successful entrepreneurs.

However, in a discussion of the process of knowledge transmission, teaching is not the only method (Singh, Narasuman & Thambusamy, 2012: 139). Figure 2-1 below presents other modes of knowledge transmission Singh et al. (2012) note that although the list is not exhaustive, it presents relevant modes. Although these modes are identified by the authors as good “driving interactive and intellectual discourse” for knowledge transmission in education in general, only three of them are useful for and applicable to the teaching of entrepreneurship, which is more practical. These modes are discussion, cooperative learning, and a creative project.

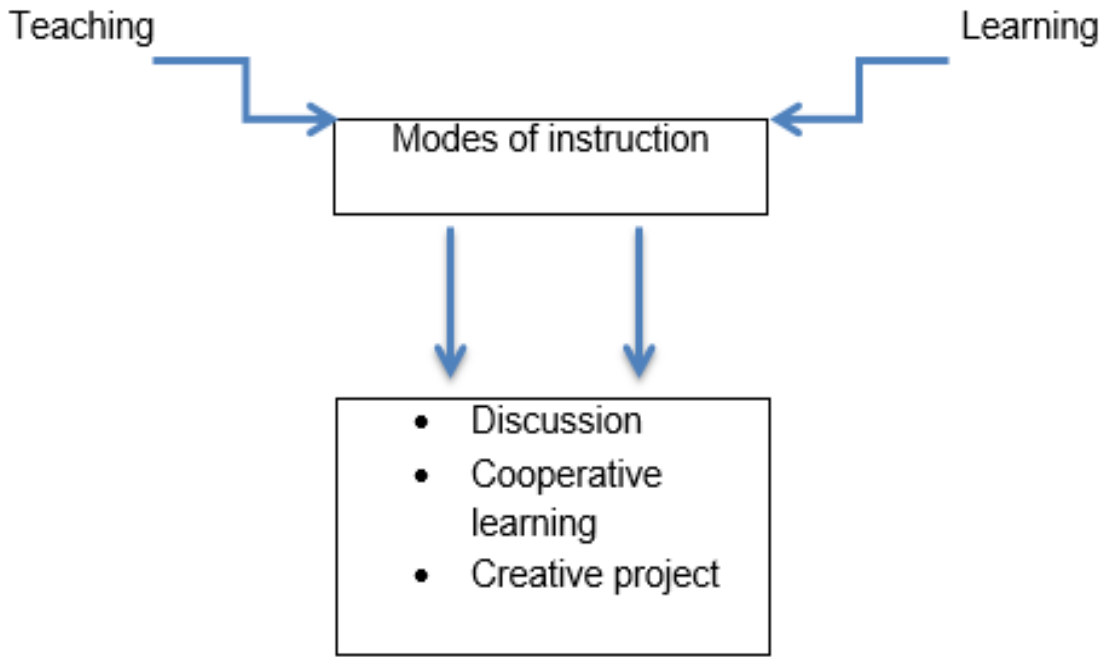

Figure 1-5: Modes of instruction, adapted from Singh et al. (2012)

Discussion: A study conducted by O'Neil, Hays and Bagwell (2013:14) notes that one of the most effective ways to teach entrepreneurship is through group discussions on entrepreneurship. Teachers can divide learners into groups and encourage them to devise an innovative business idea.

Cooperative learning: Entrepreneurs should cooperate with others to acquire information and resources, and to gather opinions on their startup ideas (Puhakka, 2007). The cooperation usually starts while learning at an institution. Cooperative learning helps upgrade the performance of learners (Hytti, Stenholm, Heinonen & Seikkula-Leino, 2010:592), as they can learn from one another.

Creative project: According to Hamidi, Wennberg and Berglund (2008:304), entrepreneurship has always been linked to creativity. Therefore, if entrepreneurship is to be

taught, either learners or teachers, but principally teachers, should have creative ideas and projects to facilitate the transmission of the information.

2.3.1 Methodology for teaching entrepreneurship education

Prodromou (2009:14) agrees that not all students are amenable to one particular way of teaching. Kuratko (2005:585) therefore claims that educators have the challenge to design effective learning methods for entrepreneurship learners. They may be consulted in the design of the entrepreneurship programme as well. Regarding entrepreneurship education learning methods, Gibb (1996:315) recognises that learners have different preferred learning styles. The results of a study conducted by Solomon, Duffy and Tarabishy (2002), focusing on a nationwide analysis of entrepreneurship education in the United States in some colleges and universities, indicate that case studies are a common method of teaching entrepreneurship. However, another study has revealed that the use of guest speakers predominates in other colleges and universities in the United States (Prodromou, 2009:15).

2.3.2 Entrepreneurship teaching approaches

According to Seikkula-Leino, Ruskovaara, Ikävalko, Mattila and Rytkölä (2010), it is challenging to include entrepreneurship education in school curricula. It appears that teachers are not yet conversant with the programme, and thus find it challenging to teach. However, to remedy to the problem of teaching entrepreneurship education, Gibb (2005) suggests that methods of teaching entrepreneurship should not only be directed at teachers, but that learners should also be implicated through learning activities. Concurring with this, Seikkula-Leino (2011:72) adds that working or teaching methods include, but are not limited to, cooperative learning, problem-based learning, group and peer work, project work, team work, learning by doing, pedagogical drama, learning diaries, and school and business cooperation. Blenker, Korsgaard, Neergaard and Thrane (2011:423) suggest that teachers could include social entrepreneurship in their teaching methods. According to them, learners could develop a certain business idea that would suit the needs of socially disadvantaged groups in schools.

However, for teaching methods to be relevant and for learners to acquire the necessary information, they need entrepreneurship education, while teachers should also go on training as suggested by Ruskovaara and Pihkala (2013:207). They should obtain current information on entrepreneurship education.

2.3.3 Content that should be covered

According to a study conducted by Carter and Collinson (1999), financial management and business communication skills are two subjects that need to be taught to entrepreneurship learners. The results of that study also revealed that some learners still had difficulty in starting a business for lack of finances or want of business ideas. In this respect, Prodromou (2009:15) suggests that to develop entrepreneurship courses, one should involve those who have studied a similar course previously, as they will know in what area they need further knowledge. However, since the target here is secondary school learners who have not been exposed to entrepreneurship education before, this researcher suggests that business lecturers, entrepreneurs and teachers be given the opportunity to decide on what subjects should be taught to entrepreneurship learners.

2.4 Factors at macro level constraining the implementation of entrepreneurship education (EE) in schools

The macro level here refers to government that is in charge of promulgating laws and taking decisions for the country. The United States, with the longest tradition of fostering entrepreneurship at business schools (Karimi et al., 2010:37), is still making major attempts to develop an entrepreneurial mindset (Seikkula-Leino, 2011:69). The same author gives the example of China, where entrepreneurship education has received increasing attention from government. He adds that Finland has actively promoted entrepreneurship education in general education and at all levels. This process, supported administratively, is appropriate for the development of the economy. According to Karimi et al. (2010:38), little is known about entrepreneurship education in Africa, hence the paucity of support from African governments towards entrepreneurship education. In Egypt, for instance, the *Global Entrepreneurship Monitor Report* (Bosma et al., 2009) identified education and training as one of the main constraining factors to entrepreneurship development and the creation of an entrepreneurial culture in the country (Kirby & Ibrahim, 2011). In Nigeria entrepreneurship education appears to be greatly neglected (Arogundade, 2011:28), since very little is done to encourage “the highly skilled entrepreneurs” that already exist among young graduates. Considering the facts presented above, one understands that the importance of entrepreneurship, while highlighted mostly in developed countries, has not yet been fully comprehended by African governments. For instance, if the Gabonese government could link entrepreneurship education in schools to job creation, perhaps they would evaluate whether there is a need for the programme or not.

2.5 Relationship between entrepreneurship education in schools and potential job creation

Although many countries are adopting entrepreneurship education in Europe, little is said about its contribution to job creation (Van der Zwan, Zuurhout & Hessels, 2013:3). In their evaluation of the relationship between entrepreneurship and business performance of small businesses in Malaysia et al. (2014:221) agree that entrepreneurial orientation plays an important role in the success of these enterprises. In other words, the more small businesses excel, the more jobs are created all over the country. In Namibia, a study conducted by Frese et al. (2002:279) revealed that there is a good relationship between entrepreneurial orientation and firm success when referring to the size of the firm, also reflected through the number of employees.

Cheng et al. (2009) contend that being an employee is now insecure. This is mainly due to the rapid development of technology, which today tends to compete with human capital. Therefore, instead of having permanent employees who, over the long term, might be of no use to a company, the tendency is to ousource, which implies more job opportunities on the market. That, according to Cheng et al. (2009), is an opportunity for small businesses and entrepreneurs to develop. In other words, new products and services have to be created and introduced. This creates a need for entrepreneurship education which will teach learners and students about creativity and innovation.

2.5.1 Entrepreneurship education

Vesper and Gartner (1997:406) in their history of entrepreneurship, note that the Harvard Business School introduced the first entrepreneurship education course in 1945. They contend that although popular at the time of inception, students later lost interest. However, in 1970, more business schools and universities became interested in entrepreneurship education. After the early attempts by business schools, universities and colleges, schools in the United States also initiated entrepreneurship education. Vesper and Gartner (1997:406) note that by 1995 over 400 schools were offering entrepreneurship education courses. Since then, the world has been positively impacted by the entrepreneurial revolution (Kuratko, 2005:577). Even after the proliferation of entrepreneurship programmes, especially in the US, with their positive effects on business, some researchers (Curran & Stanworth, 1989; Garavan & O'Cinneide, 1994; Adcroft, Willis & Dhaliwal, 2004) were still very sceptical about entrepreneurship's being taught. However, later researchers such as Gibb (2005) and Kuratko (2005) recognised that entrepreneurship was teachable, and to support the idea,

Hannon et al. (2006) acknowledged the important role of education in the learning process of entrepreneurship, and hence the existence of entrepreneurship education.

Ramanigopal, Palaniappan and Hemalatha (2012:250), contend that entrepreneurship education is a lifelong learning process, starting as early as elementary school and progressing through all levels of education. Entrepreneurship education can be viewed as a comprehensive term referring to those aspects of the educational process involving, in addition to general education, the study of technology-related sciences and the acquisition of entrepreneurial skills, attitudes, understanding, and knowledge relating to occupations in various sectors of economic and social life (NERDC, 2004:23).

Entrepreneurship education is essential not only to shape the mindsets of young people, but also to provide the skills and knowledge central to developing an entrepreneurial culture (European Commission, 2012:5). Balaban and Özdemir (2008:135) posit that such an education facilitates consciousness of entrepreneurship and unlocks the potential entrepreneur. The above mentioned agrees with the objectives of entrepreneurship education suggested by Ahmad (2013:195), which are: developing an understanding of entrepreneurship, reshaping the mindset into entrepreneurial mode, and acquiring the skills to start and manage a business.

According to Ahmad and Xavier (2012), and Johansen (2007), Malaysia and other developing countries are strongly in favour of supporting and developing entrepreneurship, as it helps creates employment.

Entrepreneurship education, by its nature, has been found to precipitate employment generation, and assist in the growth of the economy and overall promotion of sustainable economic growth and development in a number of nations (Raimi & Towobola, 2011). As highlighted by Luyima, Ndawula and Kasirye (2014:203), adjusting the education system to be responsive to the needs of learners and society as a whole, has over the years occupied the minds of educationists worldwide. They state that in China, the government encourages people to embark on entrepreneurial education in order to start up private businesses. In Ireland, enterprise education was included in the senior-cycle curriculum to equip students with competences which could enable them to value business and self-employment (European Commission, 2006). If Europe, Asia and America are far ahead with the implementation of entrepreneurship education, Africa, on the other hand, is still trying to adjust. Some countries, like Botswana, Kenya and Uganda, are already implementing programmes. In Kenya, for instance, some elements of entrepreneurship education skills are taught at all levels and integrated in some courses as a way to equip students with skills that

can enable them to start their own businesses after school. This was implemented in 2002 (Farstard, 2002). In Uganda, the Education Sector Strategic Plan 2004–2015 report observed that children from primary and post-primary levels were not acquiring the skills and knowledge they needed for either the world of work or further studies from their schools (Ugandan Ministry of Education and Sports, 2004). For this reason, there was a need for curriculum re-conception. As a result, entrepreneurship skills education was introduced in Ugandan primary, secondary, and tertiary institutions in 2003, as one of the curriculum innovations to make education responsive to the needs of society, and more specifically to eradicate poverty and unemployment (Luyima et al., 2014:204). In Nigeria, the Federal Ministry of Education introduced entrepreneurship education into the curricula of universities, polytechnics and colleges of education through their regulatory/supervisory agencies.

2.5.2 Entrepreneurship education in high school

Although most entrepreneurship programmes and courses are offered at the university level, more initiatives and interventions are emerging in primary and secondary schools (Fayolle, 2013:692).This statement is verified through the existence of and attempt to include entrepreneurship education in secondary schools in Europe, Asia and America. In Norway, for instance, to guarantee the income of young Norwegians in the future, the entrepreneurship education programme is embedded in primary and secondary education (Chiu, 2012). Ahmad (2013:191), in his paper on the need for inclusion of entrepreneurship education in Malaysian lower and higher institutions of learning, argues that there is a need for inclusion of entrepreneurship education in primary and secondary school; after graduation learners are more familiar with business opportunities, and therefore they will know how to embark on job creation for themselves and their communities. This concurs with the argument of Waldmann (1997), that teaching entrepreneurship education at school level should definitely increase the number of learners wishing to take entrepreneurship seriously after graduation.

2.5.3 Importance (benefits) of entrepreneurship education

Cheng et al. (2009) acknowledge that there has been a burgeoning of entrepreneurship education since the mid-1990s, and this is evidence of the emergence of a new economic direction. According to Prodromou (2009:3), the growth of entrepreneurship education is due to three main intellectual and policy trends. The first is how the success of an economy links to education, the second is the importance that management plays in globalisation, and the

last one is centred on government policy in making the image of the public sector similar to that of the private.

According to Fayolle (2013:692), entrepreneurship education is a hot topic on the political agenda. This is mainly because it is believed that entrepreneurship education encourages venture creation and as a result, contributes to economy growth and development (Gerba, 2012:227). In 2013, the Organisation for Economic Co-operation and Development (OECD) advised governments and universities in countries such as Germany or Tunisia on improving their strategies, structures and practices of implementing and developing entrepreneurship education.

Because education is a key to shaping young people's attitudes, skills and culture, it is vital that entrepreneurship education be addressed from an early age (European Commission, 2012:5). One significant advantage of entrepreneurship education is that it can provide students with the knowledge and skills required to set up an SME and contribute to the success of an economy (Prodromou, 2009:3).

Unemployment is a rampant challenge in many communities and most people seeking employment depend on entrepreneurs to embark on new ventures and hire them (Lekoko, Rankhumise & Ras, 2012:12025); hence the importance of entrepreneurship education. When assessing the situation of entrepreneurship education in Rwanda, Niyonkuru (2005) identified three sources of demand: government, students and education, and the business world. In agreement with this, Lekoko et al., 2012:12026 suggest that there are two reasons why students may want to study entrepreneurship. Firstly, students may plan to start their own business; secondly, they may wish to acquire knowledge that will be helpful in their careers in larger organisations. The authors note that researchers have even proposed that some students may be attracted to enterprise learning as insurance against economic downturn.

2.5.4 Objectives of entrepreneurship education

According to Arogundade (2011:27), entrepreneurship education is structured to achieve the following objectives:

- To offer functional education for the youth that will enable them to be self-employed and self-reliant. In other words, with the support of entrepreneurship education, the youth will be able to adapt to the current needs of employment.

- To provide the youth with the opportunity to identify existing business opportunities, thanks to their training. This will help develop economic growth and development.
- To ameliorate the high rate of poverty.
- To help create employment.
- To reduce rural–urban migration. If the youth living in rural areas are able to identify opportunities in those specific places, then there will be no need for them to migrate to urban areas.
- To provide new graduates with enough training and support to enable them to establish a career in small and medium-sized businesses.
- To develop a spirit of perseverance and willingness to do business, which will enable them to persist in any business venture they embark on.

However, to achieve these objectives, some strategies need to be put in place. Arogundade (2011:28) suggests a few strategies, as listed below:

- There should be some form of genuine school work-based learning incorporated in some studies as part of the national economic development strategies. The development of an apprenticeship scheme will give new graduates some work skills and experience. This can be applicable to entrepreneurship education, and can incorporate some practical work based on entrepreneurship only.
- The development of entrepreneur internship programmes, with clearly defined educational objectives. Students should be placed with local successful entrepreneurs. Working with an already established entrepreneur could be a good motivator for learners willing to embark on entrepreneurship later.
- School-based enterprises where students identify potential businesses, and plan, create and operate small businesses using the school as a mini-incubator. Direct involvement of the school in practical entrepreneurship education might motivate learners to engage in entrepreneurship as well.

2.5.5 Challenges of entrepreneurship education

According to Lekoko et al. (2012:12027), the major challenge for researchers and educators in relation to entrepreneurship education is the appropriateness of curricula and training programmes. Researchers and educators need to provide a conceptual background that allows students to understand and engage with the real business world. In today's world, researchers and politicians report that the formation of new firms is crucial to economic vitality (Lautenschläger & Haase, 2011:148).

Sofoluwe, Shokunbi, Raimi and Ajewole (2013:30) disclose several challenges of entrepreneurship education in Nigeria. Among these are the following:

- Although entrepreneurship education is included in the national curriculum, it is not properly taught. For this reason it is difficult to identify the positive input of the programme. (Garba, 2004).
- The lack of lecturer training in the field of entrepreneurship education is a further challenge. Theory is therefore more prevalent than the practice needed for more efficient results in the future (Gabadeen & Raimi, 2012).
- The lack of entrepreneurship material (textbooks) is a further challenge (Ifedili & Ofoegbu, 2011).
- Poor funding of entrepreneurship education in particular and the education sector in general. Gabadeen and Raimi (2012) posit that this funding constraint has adversely affected the implementation of entrepreneurship education curricula.

2.5.6 Entrepreneurship courses that can be offered

According to Moberg (2011:4), a standard model for entrepreneurship education courses has not yet been devised. It appears that each school or university of each country is allowed to adopt courses of its choice since, as noted by Gerba (2012:228), different types of entrepreneurship education courses are permissible. In the USA for instance, entrepreneurship, small business management and new venture creation are offered at colleges and universities as entrepreneurship courses (Solomon, 2007:178). In South Africa, Co and Mitchell (2006) identified small business management, new venture creation, small business finance, franchising, family business, creativity management, venture capital, and innovation and technology as entrepreneurship courses offered. Kabongo and Okpara (2010:301), in attempting to identify entrepreneurship courses offered in sub-Saharan African universities, discovered the following: introduction to entrepreneurship/small business management; entrepreneurial finance; entrepreneurial growth/feasibility analysis/creativity and innovation; business plan and entrepreneurship field project; product development; internships and corporate entrepreneurship; entrepreneurial marketing; and technology transfer.

2.7 A needs analysis of entrepreneurship education in schools in Gabon

2.7.1 Needs analysis

A need is a discrepancy between what is (present state) and what should be (desired state). A need reflects the existence of a certain issue that requires an intervention, in other words, an issue that must be dealt with (Ciolan, 2007:4).

Botha and Coetzee (2007:78) articulate that needs analysis is the first phase in the training cycle. They therefore define needs analysis as the systematic collection and evaluation of information to establish the gaps in the existing competency levels, skills, knowledge and attitudes.

In view of the definition of needs analysis by Botha and Coetzee (2007:78), needs analysis for entrepreneurship education in Gabon is the gathering of information regarding whether or not there is knowledge of entrepreneurship among pupils in Gabonese schools. Looking at the definition of training needs assessment in Chapter 1, it is important to highlight that if entrepreneurship is to be offered to Gabonese schools, programmes must be evaluated and judged appropriate to achieve the objectives of the course.

2.7.2 Education in Gabon

According to CRIN (2012), Gabon has a high rate of failure and dropout, and there is no real adequation between school training and employment. Moreover, the poor content of the school curricula is noted. For young people to escape from the vicious circle caused by failings in the system, active intervention is necessary (North, 2002:24). Therefore, to improve access to education and increase the chance of employment for secondary school learners in Gabon, some recommendations include the re-conception of school curricula (CRIN, 2012). As indicated in Table 1-1 in Chapter One, currently there is no evidence of entrepreneurship education being taught in Gabonese schools.

2.7.3 Entrepreneurship in Gabon

According to Ndjambou (2013:21), in order to promote entrepreneurship in Gabon in the 1990s, several structures were put in place such as: *L'agence des promotions des Investissements Privés (APIP)* and the *Fonds de Développement et d'Expansion des PME (FODEX*). However, poor financing and slow administrative procedures hindered the development of entrepreneurship for all social classes.

As assumed by Ndjambou (2013:13), the Gabonese economy depends principally on its natural resources, namely, oil, manganese and wood. Although this economy is said to be growing, thus attracting investors and multiplying business opportunities in the country, 'foreigners' living in Gabon seemed to be, for a very long time, the only ones interested in these opportunities, and thus engaging in entrepreneurship (Ndjambou, 2013:15). This simply clarifies the fact that entrepreneurship (or knowledge of it) exists in Gabon, but the main actors are foreigners resident in the country.

However, as time goes by, it seems that the Gabonese people are becoming more interested in entrepreneurship, although, as noted by Ndjambou (2013:20), the Gabonese still lack the "entrepreneurial mindset". It is therefore vital to "create favourable conditions to the development of entrepreneurship in Gabon" (Ndjambou, 2013:15). This could be a call to entrepreneurship education in Gabon, discussed in the section below.

2.7.4 Entrepreneurship education in Gabon

Although some major steps were taken in terms of the improvement of education in Gabon, very little was said about entrepreneurship and entrepreneurship education. As presented in Table 1-1, the school curriculum of Gabon does not include entrepreneurship education. For Jones and English (2004:416), entrepreneurial education is the process of providing individuals with the ability to recognise commercial opportunities and the insight, self-esteem, knowledge and skills to act on them. As stated above, the government of Gabon is actively looking for ways to improve the education system to reduce failure and dropouts, and facilitate entry to employment or simply fight against unemployment. But could that really be done with little knowledge of entrepreneurship education? Or in this era, shouldn't learners be encouraged to become job creators rather than trying hard to fit into ready-made jobs? Perhaps at this stage there is a need to set up workshop sessions educating school administrations at large and learners in particular about the benefits of entrepreneurs. In this regard, North (2002:24) asserts that the world of work has changed dramatically over the past few decades, and it can be expected to change even more rapidly in the years to come.

2.8 Activity Theory as intrinsice to this study

After the 1917 Russian Revolution, a new psychology based on Marxist philosophy emerged, and this led to the creation of Activity Theory (Raeithel, 1992). Later developed by Vygotsky in 1978, and Leont'ev in 1981, to understand work activities among people (Le Roux, 2013), it has progressively and increasingly been used for educational studies (Behrend, 2014). This was facilitated by the major contribution of Yjrö Engeström

(Engeström, 1987). The Activity Theory framework comprises seven elements as presented in Figure 2-2.

In this study, Activity Theory was used to present the results and to understand and discuss them. The framework helped understand the interaction between stakeholders in the education system (Wilson, 2014) in relation to entrepreneurship education in schools.

The role of Activity Theory in this research is to provide insight into the role of each stakeholder if entrepreneurship education were to be considered for secondary schools in Gabon.

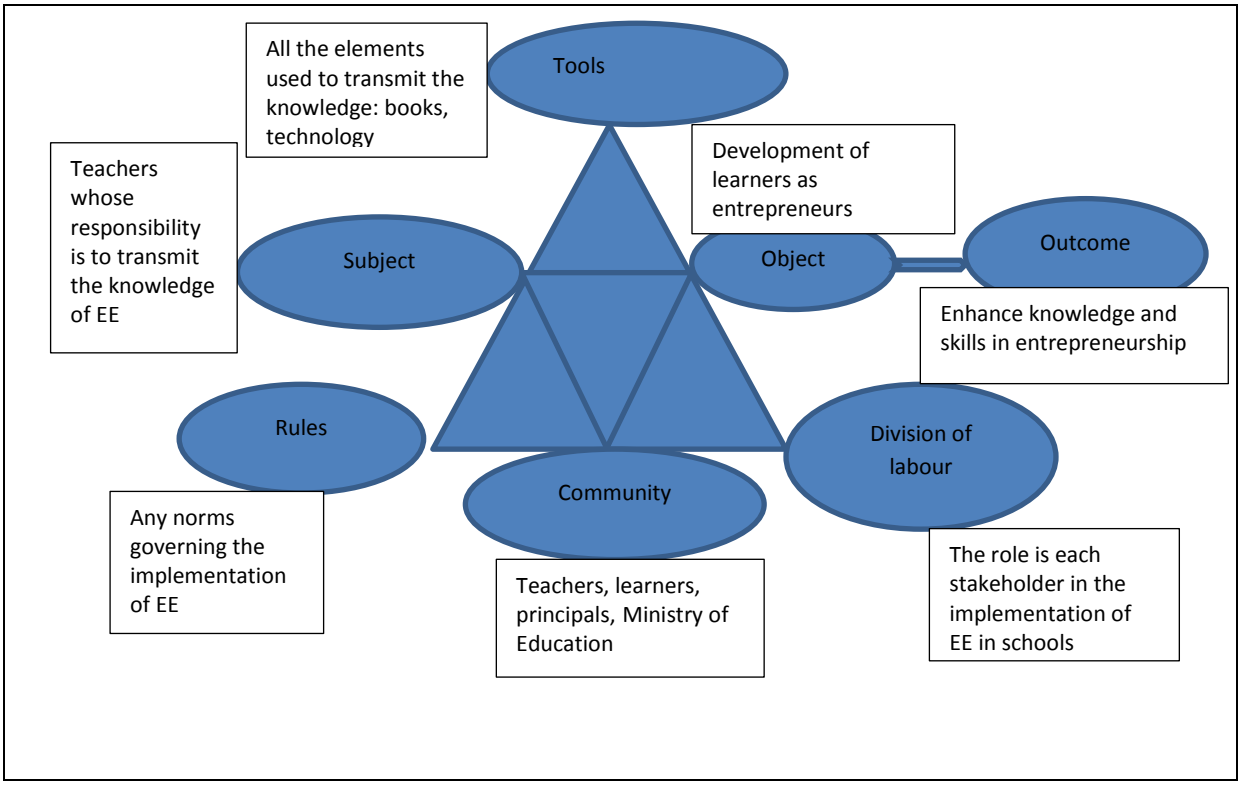

Figure 1-6: Engeström's Expanded Activity Theory Model (Adapted from Hashim & Jones, 2007)

2.9 Summary

The review of entrepreneurship education in schools concludes that entrepreneurship is the concern of all stakeholders in the education system. Pupils, Ministry of Education officials, teachers and principals are all equally involved and should give input into curricula. To achieve good results in the implementation of the subject or the design of the curriculum in respect of entrepreneurship, teachers must be well equipped. They need proper material,

while learners need to be motivated. After all, without motivation, positive attitudes and learning skills, pupils will not learn (Biggs, 2012). The literature also stresses the role of other governments in the implementation of entrepreneurship education in the school curriculum, suggesting that it is principally the responsibility of the decision makers in education to identify the needs of society in order to take subsequent action. The next chapter discusses the research design and methodology the researcher used to conduct this study, considering the research question: 'What are the needs that should be addressed so that entrepreneurship education in high schools in Libreville can be initiated?'

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

Research methodology is the scientific and systematic way of collecting and analysing data in order to reach a satisfactory solution (Babbie & Mouton, 2001). This study adopted a mixed-methods approach for data collection. According to Lapan and Quartaroli (2009:245), it is more advantageous to use a mixed-methods approach as it gives a more solid foundation to the research (Gorard & Taylor, 2004).

The purpose of the study was to determine if there is a need for entrepreneurship education in high schools in Libreville. The present chapter explains the methods used to gather information from pupils, teachers, principals and some officials from the Ministry of Education of Gabon, by using the Activity Theory framework. A detailed research methodology, in terms of the design and instruments of collecting and analysing data, is discussed.

3.2 Theoretical framework

In this study, Engeström's Expanded Activity Theory Model of Activity Theory is used as theoretical framework as it is suitable for research related to education (Scanlon & Issroff, 2005).

Partly introduced into the English-speaking academic world by Yrjo Engeström, Activity Theory is an activity system depicting the role of every stakeholder in the education system. A number of researchers (Scanlon & Issroff, 2005; Crawford & Hasan, 2006; Liaw et al., 2007) value Activity Theory for its ability to depict how individuals work together and the interrelation between them. Its most common representation is the triangle (Cole & Engeström, 1993), which contains seven elements, namely subject, object, tools, rules, community and division of labour (see Figure 3-1). The representation mainly depicts the interaction between all individuals involved in the activity system. In order to adapt the content of Activity Theory to this study, the researcher converted each element into the relevant stakeholders as follows:

- Subject ➔ Teachers

- Tools ➔ Relevant material and technology for teaching entrepreneurship education

- Object ➔ Development of learners as entrepreneurs
    - Outcome ➔ Enhance knowledge and skills in entrepreneurship

- Rules ➔ What are the rules pertaining to the implementation of entrepreneurship education in schools?

- Community ➔ Teachers, learners, principals, Ministry of Education

- Division of labour (roles) ➔ What role is each stakeholder playing?

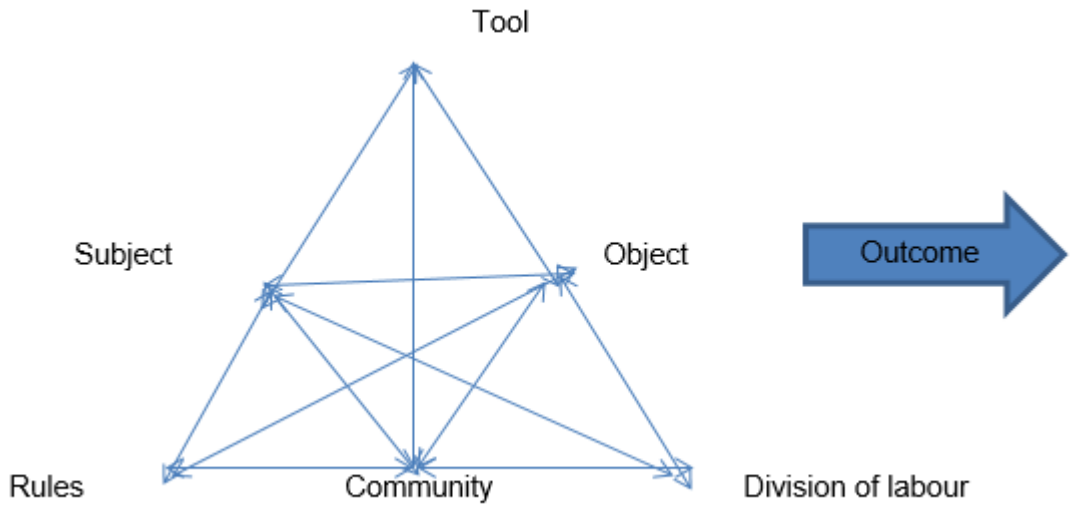

Figure 1-7: Engeström's Expanded Activity Theory Model (Hashim & Jones, 2007)

3.3 Design

A research design is a blueprint that details the manner in which the data of the study should be collected and analysed to elicit relevant answers to questions posed by the investigator (Flick, 2011a:65). Gray (2013:36) states that there are three different types of research design: exploratory, descriptive and explanatory. According to Creswell (2013), the goal of exploratory research is to enquire about unknown parts of the research. Exploratory research allows the researcher to obtain more information about a specific problem of which relatively little is known (Gray, 2013:36). In this case, since very little is known about entrepreneurship education in Gabonese schools, this exploratory research aims at finding out what needs to be addressed for entrepreneurship education to be initiated.

3.4 Methodology

Creswell (2013) lists three different approaches to research: quantitative, qualitative and mixed-methods research. According to Burns and Grove (2005), research methodology refers to measures taken to obtain information for the advancement of a research project. Moreover, the methodology represents the map of the study.

3.4.1 Quantitative research

In quantitative research, data are numbered and can be analysed statistically (Creswell, 2013). This type of research implies that the researcher gathers and analyses information established on quantity. In the context of this research, quantitative data were collected through self-administered questionnaires distributed to Grade 12 learners of three selected schools in Libreville, Gabon.

3.4.2 Qualitative research

Unlike quantitative research, qualitative research tends to explore and comprehend the perceptions of participants in respect of the problem at hand (Creswell, 2013). The qualitative approach focuses on obtaining information by establishing the views and opinions of participants. This information is usually not quantified, as the techniques focus on group interviews (Kothari, 1990). This researcher made use of face-to-face interviews to gather data.

3.4.3 Mixed methods research

This study adopted a mixed-methods approach. As defined by Kvaal et al. (2014:105), a mixed-methods design may be defined as “research in which the investigator collects and analyses data using quantitative and qualitative approaches in a single study”. In the context of this study, face-to-face interviews and self-administered questionnaires were used to secure a more comprehensive picture of the problem at hand. In other words, the researcher obtained information for the study through questionnaires, allowing participants (learners) to choose the answers they found most suitable to the questions, and through in-depth interviews, allowing participants (teachers, principals and a member of the Ministry of Education) to share their views and opinions regarding entrepreneurship education.

3.4.4 Population

According to Weathington et al. (2012), a population consists of all individuals or things that the researcher wants to describe. Therefore, the research population for this study was limited to the teachers and principals of three schools. An active member of the Ministry of Education in Gabon also participated in the study.

The researcher chose this particular population because she believed that they would provide valuable information on the topic, since they are directly invovled with entrepreneurship education. The researcher had to travel to obtain responses from the participants, and the limited time for completion of the study did not allow the entire population to participate. For that reason, a sample had to be drawn.

3.4.5 Sampling

According to Teddlie and Tashakkori (2009:169) sample is the selection of a subgroup of the population that enables the researcher to find an answer to his or her research questions. Teddlie and tashakkora (2009:171) further list three types of sampling namely random sampling, stratified sampling and cluster sampling. For the quantitative part of the study, this researcher randomly chose 50 Grade 12 learners from three different schools.

In order for the researcher to get the suitable informant (Tongco, 2007), purposive sampling was used. According to de Vos et al. (2009:202), the choice of purposive sampling is at the discretion of the researcher. Looking at the type of information needed, the purposive sample in this study was the group of principals and teachers, and the government official. Sampled teachers were involved in the study based on the fact that they teach business related subjects such as economics and, contrary to mathematics teachers they are more likely to teach entrepreneurship education. The principals were interviewed because they are interested in the idea of entrepreneurship education in school and are willing to implement once approved by the authorities. Grade 12 learners participated in the interview because they are prospective candidates within the entrepreneurship education programme. The researcher believed that this group of participants could provide responses that could not be obtained from learners, as they form part of the education (government official) and school (teachers and principals) management. In other words, these participants had the specific type of knowledge required for this study (Prance, 2004; Vargas & Van Andel, 2005; Li et al., 2006).

3.4.5.1 Sample size

Flick (2011a:253) agrees that a sample can be defined as elements of the population that can scientifically and systematically be selected for the purpose of being studied. For

reasons such as time constraints, the whole population directly concerned with the matter could not be studied. A random sample of 50 learners from each school (School 1, School 2 and School 3), their teachers and principals, and a member of the Ministry of Education was selected for the study. Table 3-1 below presents the sample population of the study.

Table 1-4: Sample population

Population				
Schools	Learners	Teachers	Principals	Government ministry representative
Lycée 1	50	2	1	1
Lycée 2	50	2	1	
Lycée 3	50	2	1	
Total	**160**			

3.6 Context of the study

The participants in the study were 160. These participants were organised into three categories: Pupils (included in 'object' in the activity theory), teachers and principals (referring to 'subject' in the activity theory) and the Director General of the Technical and professional teaching (falling into 'rules' in the activity theory). All learners, teachers and principals were from three selected schools in the urban area of Libreville.

The selected schools offer general teaching with traditional subjects such as mathematics, general economics, English, and French; however one of the schools offers both general and technical subjects. The technical subjects include technical and commercial skills and economics of enterprises. Learners are aged between 17 and 24, with some exceptions of a few learners aged 16, 25 and 26. It should be noted that in Gabon there is no age restriction in schools. Only Grade 12 learners were chosen as participants in this study. Though located in the urban area in Libreville, all three schools are of middle socioeconomic standing and welcome learners from low, middle and high socioeconomic backgrounds. The research design of this study was planned and structured to identify whether there is a need for entrepreneurship education implementation in high schools in Libreville, Gabon.

3.7 Research instruments

For data collection, this researcher adopted a mixed-methods approach. Riazi and Candlin (2014:143) state that a mixed method research is used to achieve five purposes:

triangulation, complementarity, development, initiation and expansion. In the case of this research, qualitative and quantitative were mixed to achieve complementarity as the researcher needed the views of learners and the schools administration regarding entrepreneurship education. A Likert-scale questionnaire, which is one of the most popular instruments used for data collection, and easily understood, was used to measure the attitudes and opinions of the respondents.

3.7.1 Self-administered questionnaire

According to Bernard (2011:192), with self-administered questionnaires it is easier for the researcher to collect data from a large sample of respondents at a low cost. Fox and Bayat (2007:89) define a questionnaire as a list of questions compiled by a researcher for a particular investigation, and either written or oral, to obtain the relevant information from respondents. In this case, it allowed the researcher to get a lot of information from a larger group of people and data was easier to analyse.

3.7.1.1 Rationale for use of questionnaires

On examining the advantages of using self-administered questionnaires, which include low cost, time management, and identical questions to all respondents as well as anonymity afforded to respondents, the researcher judged it preferable to use questionnaires (see Appendix A) over other data-collection methods. A Likert-scale questionnaire was therefore developed to serve as the primary source of data collection. The reason for using a Likert-scale questionnaire as the data collection instrument was that it allows for degrees of opinion, ranging from ‘strongly agree’ to ‘strongly disagree’. Variables such as gender, race, age, marital status and years of experience were considered.

3.7.2 Face-to-face interviews

Prior to the actual interviews, the interview questions were sent to the participants. Each participant received the questions once, and two reminders for the actual interviews were sent. Generally, participants were punctual for the interviews. Some of them (two teachers) did not have much to say for they knew little about the topic. A total of 10 individuals were interviewed. It is noteworthy that the majority responded well, as the length of each interview session was about 15 to 20 minutes. All interviews were recorded, except for one. The principal of one school refused to be recorded, so the researcher took written notes. Although all other interviews were recorded, the interviewer still found it necessary to take some “back-up notes” (Mack et al*.,* 2005) in case the recorder failed to record.

For Kvale (1996:2), the research interview is the ensemble of knowledge. An interview is the collection of data by one person from another through a person-to-person meeting, which Kvale (1996) terms a ‘conversation’. From the above one can therefore define an interview as a structured conversation between at least two people.

Griffee (2012) identifies two kinds of interviews: standard interviews and non-standard interviews. In the standard interview, the interviewer has set up questions in advance and does not intend to diverge from these questions. In the non-standard interview, the interviewee tends to tell a story that the interviewer is willing to listen to while taking notes. This researcher made use of standard interviews to allow each interviewee to answer only the questions asked (as long as the necessary information was obtained), in view of the time allocated for the interviews. In fact before the interviews, the interviewees asked how much time the interviews would take, and based on the number of questions and the type of information needed, the researcher allocated 20 minutes to each interview. Some took between 15 to 20 minutes.

3.7.2.1 Rationale for use of interviews

Interviews provide a platform where the interviewer and interviewee can exchange ideas without any interference (Harris & Brown, 2010). They provide rich accounts of opinions. Compared with questionnaires, here the researcher had the opportunity to freely ask for clarity when the respondent gave an unsatisfactory or unclear answer.

3.8 Data collection process

3.8.1 Design of self-administered questionnaires

The questionnaire was divided into three sections: A, B and C. Section A solicited demographic information, while Section B and Section C sought basic knowledge of entrepreneurship and evaluation of current subjects respectively (see Appendix B). In both Sections B and C, learners were given an option to either rate from ‘strongly disagree’ to ‘strongly agree’ or answer ‘yes’ or ‘no’/’true’ or ‘false’ to a given question, or better still, answer in their own words. Prior to the distribution of questionnaires, a covering letter explaining the purpose of the study and its importance was e-mailed to the principal of each school. As the letters were signed and stamped, they served as letters of permission, granting the researcher the right to conduct her study in their respective schools. Permission having been granted, interview questions to the principals and teachers were e-mailed to the principals together with the questionnaire. A total of 150 questionnaires were administered, but only 111 questionnaires were returned, giving a response rate of 74%.

3.8.2 Face-to-face interviews

The researcher also made use of interviews (See Appendix D) to collect qualitative data. Interview questions were straightforward, addressing entrepreneurship and entrepreneurship education, and the education system at large. It is important to specify that two different sets of interview questions were asked. One set was addressed to the principals and teachers and another to the Director General of Technical and Professional Teaching. He represented the active member of the Ministry of Education.

3.8.3 Design of interview questions

The rationale for collecting data via interviews was for the researcher to allow participants to share their perspectives regarding a given topic (Wahyuni, 2012). In this case, the participants, teachers, principals and active member of the Ministry of Education gave their views on entrepreneurship education in high schools. The interview questions were structured to include open-ended questions and provide an opportunity for the interviewees to share their opinions.

This researcher designed two different sets of questions: one was aimed at teachers and principals, while the other was aimed at the Director General of Technical and Professional Teaching.

The interview aimed at the teachers and principals comprised 14 questions, while the interview aimed at the Director General of Technical and Professional Teaching comprised 10 questions.

3.9 Data-collection procedure

For a successful study, the procedure for data collection must be meticulously followed. Procedures for a Likert-scale questionnaire were applied. Data collection is discussed in detail below.

According to Terre Blanche et al. (2006), data is an essential element when conducting research. It is used to obtain the necessary information on a topic. This researcher made use of mixed methods to collect data. The researcher travelled to Libreville, Gabon, to distribute questionnaires directly to the targeted population. This was done intentionally for the researcher to receive the appropriate information. Apart from questionnaires, interviews with principals, teachers and an active member of the Ministry of Education in Gabon, were also conducted. Participants were asked questions relating mainly to the implementation of entrepreneurship education in schools and the relevance of subjects currently taught in schools with regard to learners' career choices. It is crucial to remember that the aim of this

research was to identify the need for and possibility of implementing entrepreneurship education in the Gabonese school programme.

3.9.1 Self-administered questionnaires

After designing the questionnaires and having been granted approval to distribute them, the researcher sent a copy to the principal of each school to inform them of the kinds of questions that would be posed to their learners.

On the researcher's arrival in Libreville, the questionnaires were given to the principals who distributed them to the learners after the researcher had carefully read the instructions to them.

It is important to state that owing to time constraints (by the time the researcher arrived in Libreville, learners were preparing for their end-of-year exams), the researcher was not permitted to observe learners fill in the questionnaires. They completed them at home and returned them the next day. Questionnaires were collected from the principal of each school. After receiving the completed questionnaires, there was no further personal contact between the researcher and the participants. Table 1-5 depicts the response rate for questionnaires:

Table 1-5: Response rate

	Questionnaires distributed	**Questionnaires returned**	**Response rate %**
School 1	50	35	70
School 2	50	50	100
School 3	50	26	52
Overall response rate	**150**	**111**	**74**

3.10 Data analysis

Data analysis is the manner in which the researcher gives meaning to collected data (De Vos et al., 2009). For this study, primary data were collected through questionnaires and interviews, while secondary data were gathered from journals articles, Internet sources and books.

3.10.1 Self-administered questionnaires

Researchers generally use Microsoft Excel as quantitative data analysis software (Garrett, 2015). Niglas (2007) concurs that Microsoft Excel is an instrument frequently used to analyse data. Although SPSS Statistics is a common software package used by many researchers, the program is not that user friendly (Tonidandel & LeBreton, 2015). The researcher therefore chose to use Excel to analyse the quantitative data, as Excel was eminently suited to simple calculations. Microsoft Excel was suitable for data analysis as it was easy to use and allowed the researcher to create graphs to analyse information (Niglas 2007). Data were inserted into an Excel spreadsheet. A title was given to each set of data according to the information needed.

The questionnaire used in this study contained ten open-ended questions. In order to objectively analyse the responses to the questions, the researcher chose the qualitative method. This is based on the understanding that the qualitative method provides direct interpretation of authentic responses to questions. However, the researcher is aware of the common qualitative research dilemma of over-citing responses (Elo & Kyngäs, 2008).

3.10.2 Face-to-face interviews

To analyse the responses to the interview questions, the researcher made use of codes, categorisation and themes. Moreover, the elements of Activity Theory were used as guidelines for the analysis of the data. According to Strauss (1987:3), coding is a method that enables one to organise and group similarly coded data into categories or 'families' because they share some characteristics. To confirm the findings from coding and categorising, Wordle, a practical and useful research tool for qualitative analysis (McNaught & Lam, 2010) was used. Wordle is counted among the numerous online tools available for qualitative data analysis. A word cloud is an image of text, where the more a word is used in an interview the bigger it appears on the image (McNaught & Lam, 2010). It can be used in research (Clement et al., 2008), in public speeches (Dann, 2008), and to analyse survey responses in education (Ramsden & Bate, 2008).

Categorisation and coding were used. Coding and categorising were not the only methods the researcher used to analyse the data. As a complementary method, and to obtain a better view and understanding of the participants' responses, the researcher made use of Wordle. According to McNaught and Lam (2010:630), Wordle is a program that enhances the "most frequently used words" in a bigger font. At first the program was used to compare the themes and categories as per the researcher's understanding of the responses. Then, since other researchers (Clement et al., 2008; McCall et al., 2015; Siefken et al., 2015) have used Wordle for analysis, and as Ramsden and Bate (2008) recommend it for interview

responses, the researcher decided to use it as it is fast and well suited to academic research (McNaught & Lam, 2010:631).

3.10.3 Challenges encountered

Research always presents challenges. One of the major challenges the researcher faced was that she could not assist while respondents were completing the questionnaires, since they had a very tight schedule as they were about to commence their Grade 12 examinations when the researcher arrived in Libreville. As a result, the researcher had to implement a secondary plan, which was to explain the questions and instructions to the learners and give the questionnaires to the principal who distributed them to the learners. This made it difficult for the researcher to collect the questionnaires on time, since some learners did not bring them back as planned on the following day, while others lost their questionnaires. Moreover, it was also challenging for the researcher to find a member of the Ministry of Education willing to be interviewed. Furthermore, one of the principals refused to be recorded, so the researcher had to take written notes as he was answering the questions. One last challenge encountered was with a lecturer who apparently knew little about the topic. As advised by Mack et al. (2005:36), the researcher terminated the interview.

3.11 Ethical considerations

Before conducting a study, ethics guidelines were provided to the researcher. According to McMillan and Schumacher (2006:142), ethics in terms of conducting research aims to protect the rights and welfare of the subjects. Ethical conduct in research demands that responses will be treated in strict confidentiality, participation is voluntary, and participants will not be identified. This was contained in the letters (which also served as letters of permission) addressed to and signed by each school principal, which clearly indicated that participation in the research was voluntary. Furthermore, as this research was undertaken for a postgraduate degree, ethical research conduct was observed, as delineated by the Cape Peninsula University of Technology (CPUT). The Research Ethics Committee of the Faculty of Business at CPUT granted approval to the researcher to carry out the investigation. The researcher followed the ethical guidelines of CPUT, including an ethics review process, before e-mailing and distributing the questionnaires to the participants.

The following points were used in this study to comply with ethics requirements (Gajjar, 2013; Udo-Akang, 2013; Manyasi, 2014):

- Informed consent: Permission to conduct the research was granted in a letter. The purpose of the research and instructions with regard to the questionnaires were

explained in the covering letter sent via e-mail to each school principal to make it easier for participants to understand how to complete the questionnaires.

- Confidentiality: The research assured participants that the information they shared would not be disclosed to any person. Strict confidentiality was maintained.
- Voluntary participation: It was clearly stated in the covering letter that participation in the survey was voluntary.
- Anonymity: Participants did not disclose their identity while answering the questionnaires.
- Avoidance of plagiarism: In this study the researcher avoided plagiarism and all sources of reference were duly acknowledged.

3.12 Summary

In this chapter, the purpose of the study was clarified by using the Activity Theory framework. The methodology used to carry out the study was also explained and reasons for using the selected methods were given. The study, conducted in Libreville Gabon in three selected schools, made use of a mixed-methods approach. The participants (Grade 12 learners) were randomly selected for the quantitative part of the study. The qualitative part of the study, on the other hand, made use of a purposefully chosen sample, including teachers, principals and a member of the Ministry of Education. In the next chapter, the data collected are presented.

CHAPTER FOUR: FINDINGS

4.1 Introduction

In this chapter the results of the data analysis are presented. Data were collected to answer the fundamental question posed in Chapter 1 of this study, that is, what needs should be addressed for entrepreneurship education to be implemented in schools in Libreville, Gabon. The aim of the research is to determine if there is a need for entrepreneurship education in high schools in Gabon. As mentioned in the previous chapters, the researcher used the Activity Theory framework to conduct the study. The research findings were obtained through self-administered questionnaires distributed to Grade 12 learners of selected schools and face-to-face interviews conducted with teachers, principals and an official of the Ministry of Education in Gabon. Based on the findings emanating from these methods, results are presented according to the framework to address the research questions and objectives presented in Chapter One of the study.

4.2 Main research question

What are the needs that should be addressed so that entrepreneurship education in high schools in Libreville can be initiated?

4.2.1 Research sub-questions

- Why is there a lack of entrepreneurship education in Libreville schools?
- Is there a need for entrepreneurship education in Libreville?
- What are the needs of high schools in Libreville regarding entrepreneurship education and what is the relationship between entrepreneurship education in schools and job creation?

4.2.2 Objectives of the research

- To determine what factors (at micro, meso and macro levels) constrain the implementation of entrepreneurship education in Gabon schools.
- To undertake a needs analysis regarding entrepreneurship education in schools in Gabon.
- To establish the relationship between entrepreneurship education in schools and potential job creation.

For a better understanding of the study, the theoretical framework presented in Chapter Three was used.

4.3 Presentation of results

The results are presented according to the activity theory framework presented and explained below:

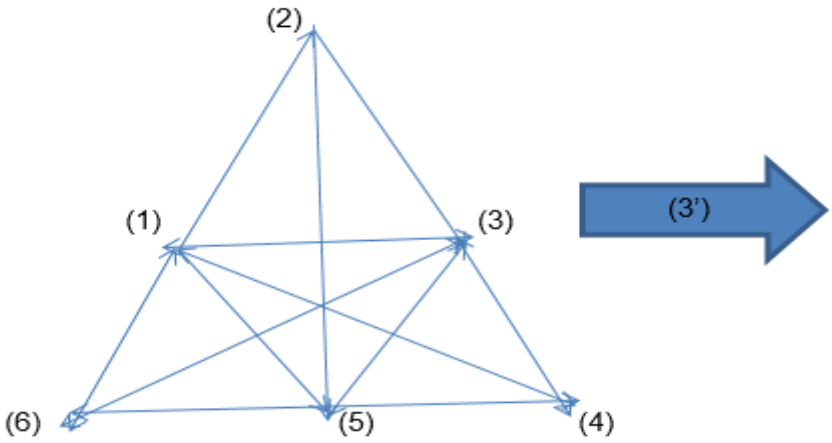

Figure 1-8: Activity Theory

(1)Subject refers to teachers; (2) Tools refer to all instruments used for transmission of the information, for instance: books, classrooms, technology, chalk…; (3) Object refers to the deveoplement of learners as entrepreneurs, and object becomes (3') Outcome when EE has been well assimilated; (4) Division of labour represents all the stakeholders in entrepreneurship education; (5)Community mainly refers to teachers and learners; and (6) Rules refers to the procedure for the implementation of EE.

As the researcher focused on a needs analysis for entrepreneurship education in high schools in Libreville, the Activity Theory framework was used. The interaction between the stakeholders in entrepreneurship education was considered as an activity. Moreover, as the data collected are presented following the elements of Activity Theory, questions attached to each element are also presented below:

- **Subject:** The subject represents the teachers and the way they make use of all available/needed resources to teach entrepreneurship education. It is assumed that teachers know best how to use a certain tool to make learners understand a topic. For instance if the teacher believes that an entrepreneur is made and not born, he/she will use the tools available to him in an active way that will allow the teacher and learners to interact well. In this way, it will be easier to detect and/or develop the entrepreneurial characteristics and interest in the learner (Engeström, 1987). Below are the questions included in the interview questions that referred to the subject:

- ✓ How can you, as a teacher, support the development of the awareness and skills necessary for developing an entrepreneurial mindset and skills in this school?
- ✓ What training and development will teachers need to implement the entrepreneurship education programme?

- **Tools:** The tools represent all instruments used for the transmission of the information regarding entrepreneurship education, such as images, technology, books, and classrooms. It should be noted that these tools could be material or non-material. If some of the tools cited above are material, the non-material ones include language. While interacting with learners, teachers must use a language well understood by learners. When talking about language here, reference is not only made to English, Chinese or French to establish communication, but also to the content of the communication (Engeström, 1987). For instance, if the teacher is to teach entrepreneurship education, he/she must ensure that the terms used during the lesson are well understood by learners, otherwise communication will be hindered. Therefore, teaching questions that foster open interaction must be used. Below are the questions included in the self-administered questionnaire that referred to 'tools':

  - ✓ How satisfied are you with your current subjects?
  - ✓ If an entrepreneurship education programme were offered, what subjects should be taught and what teaching and learning methods should be used?
  - ✓ Do you think entrepreneurs are born or made?
  - ✓ Do you think you have the necessary skills to create a business at this stage of your education?
  - ✓ Would you like to have associations for student entrepreneurs in your school?
  - ✓ Can you draw up a business plan?
  - ✓ How relevant do you feel your current subjects are to your career goals?
  - ✓ Classify how adequate your school curricula are for a possibility of business creation after graduation.

- **Object:** Object represents the development of learners as entrepreneurs, while Engeström (1987) calls it the problematic element between teachers and learners. It is for that reason that the researcher says the object refers to entrepreneurship education in this specific case. Below are the questions included in the self-administered questionnaires referring to 'object':

    - ✓ Have you ever heard of entrepreneurship education?
    - ✓ Do you think it would be a good idea to implement entrepreneurship education in your curricula?
    - ✓ Is entrepreneurship taught in this school?

- **Outcome:** From object, entrepreneurship education becomes outcome when well assimilated by learners through effective teaching by teachers and through their use of appropriate material and non-material tools as mentioned above (Engeström, 1987). Below are the questions included in the research instrument (self-administered questionnaire and interview):

    - ✓ What impact do you think entrepreneurship education at school level will have on the economy?
    - ✓ Would you like to become entrepreneur?
    - ✓ Do you think it is necessary to study entrepreneurship?
    - ✓ What do you want to do after school?

- **Division of labour:** Since the focus of this study was on the stakeholders in entrepreneurship education, division of labour was specifically addressed among the teachers and principals, learners, and the Ministry of Education in the implementation and development of entrepreneurship education. This delineates the role that each participant plays in entrepreneurship education in high school. Below are the questions that were included in the research instrument (interview).

    - ✓ Who would be responsible for designing the curriculum and what would they need to do?
    - ✓ What are the vision and main objectives of the National Education Ministry regarding entrepreneurship education?
    - ✓ Does the Ministry have funding for the implementation of entrepreneurship education in schools?

- **Community:** The community specifically addresses teachers and learners but more specifically learners who directly and continuously share the same goal, which is entrepreneurship education. They basically belong to the same community as they both study and teach entrepreneurship education. Below are the questions that were included in the research instrument (self-administered questionnaires):

    - ✓ What is the distribution of participants according to schools (demographics)
    - ✓ What is the gender distribution?
    - ✓ What is the age distribution?
    - ✓ Would you like to look for a job after school?
    - ✓ Do you think you have the necessary skills to start a business at this point of your education?
    - ✓ Are any of your family members entrepreneurs?
    - ✓ Do you think you are on the path to your career goals?
    - ✓ Do any of your friends in school want to own a business?
    - ✓ What is the frequency distribution of career goals?

- **Rules:** Rules refer to the procedure to follow for the implementation of entrepreneurship education in high schools in Gabon. These rules refer to the entity in charge of designing the school programme in Gabon, and the availability of funds for the implementation of the programme. They also refer to the interaction between the Ministry of Education and schools, the teachers and the learners (Engeström 1987). Below are the questions that were included in the research instrument (interview):
    - ✓ What would be the role of the National Ministry of Education in the implementation of entrepreneurship education programmes in schools?
    - ✓ How can the Ministry of Education support the development of the awareness and skills necessary for developing an entrepreneurial mind set and skills in Gabonese schools?

4.4 Subject

As highlighted in Chapter Three, the subject refers to the teachers, without whom entrepreneurship education would not be taught to learners. In this section, the researcher

extrapolates from the data collected the role of the teacher in the transmission of information and development of skills for entrepreneurship education.

4.4.1 Teachers' support for entrepreneurship education

All teachers and principals who participated in the study (nine in total) said that they would use support programmes and activities to support entrepreneurship education in schools. They all agreed that learners were the main beneficiaries of the programme as they would be able to support themselves after they had acquired some knowledge in business and entrepreneurship.

Figure 1-9: Views of teachers regarding their input in the teaching of entrepreneurship education

To answer this fundamental question on the role of teachers in the implementation of entrepreneurship education, the researcher received diverse responses. Below are some of the captured ones:

> **'**I will support the idea by putting the programme in place in my school, looking for professionals in the business area since I am not one, in order to train the pupils in the business field.'

> 'I will help and encourage learners to be interested in entrepreneurship by taking them through activities and projects that will develop their entrepreneurial skills … I will also be able to take the learners to already established entrepreneurs to have moments of exchange with them.'

‘Teachers can support such an initiative by talking to our hierarchy about the importance of such a programme …’

‘As teachers we will train learners the right way, by encouraging them with interesting activities…’

’ I will do everything I can to promote the practical part of the teaching…’

These quotes are an indication that teachers are welcoming the idea of introducing entrepreneurship education to Gabonese schools.

4.4.1.1 Training for teachers

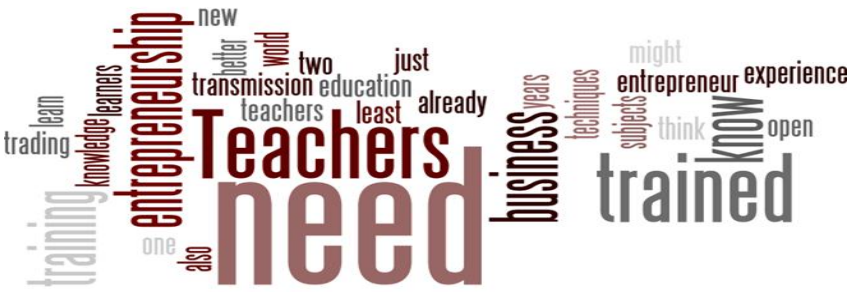

Figure 1-10: Views of teachers regarding the need for teacher training in entrepreneurship

As suggested by Wordle, the bigger the word, the more recurrent it is in the interview responses. Most participants think that there is a great need for teacher training in entrepreneurship and business subjects. If entrepreneurship is to be implemented, then there is a need for training. To date teachers were only trained to teach traditional subjects taught for years in high schools.

Among the teachers and principals who participated in the interview, some suggested that teachers should receive the same training in entrepreneurship education as learners: ‘Teachers will need the same training learners will have in entrepreneurship education … ‘Teachers should also be trained in entrepreneurship or at least learn one or two subjects in business …’ One principal revealed that their knowledge of business, which seems rather limited, needed to increase: ‘I don’t think teachers will need more than they already know.

They might just need to open up more to the business world …' (Principal C). To add to the type of training needed for entrepreneurship education teachers in Gabonese schools, Principal B thought that information technology was required: '… if we are to be trained, then we will need training in IT' (Principal, School B).

4.5 Tools

Since our tools represent the necessary material including textbooks, technology, and environment, this section presents the opinions of the respondents regarding the potential necessary tools for entrepreneurship education if it were taught in schools.

Figure 1-11 represents the views of learners regarding their satisfaction with their current subjects. Of the 111 learners who responded to the question, 16 learners (14.41%) said they were not satisfied with the current subjects, 41 learners (36.94%) said they were satisfied with their current subjects, 48 learners (43.24%) were neutral and 6 learners (5.41%) were extremely satisfied.

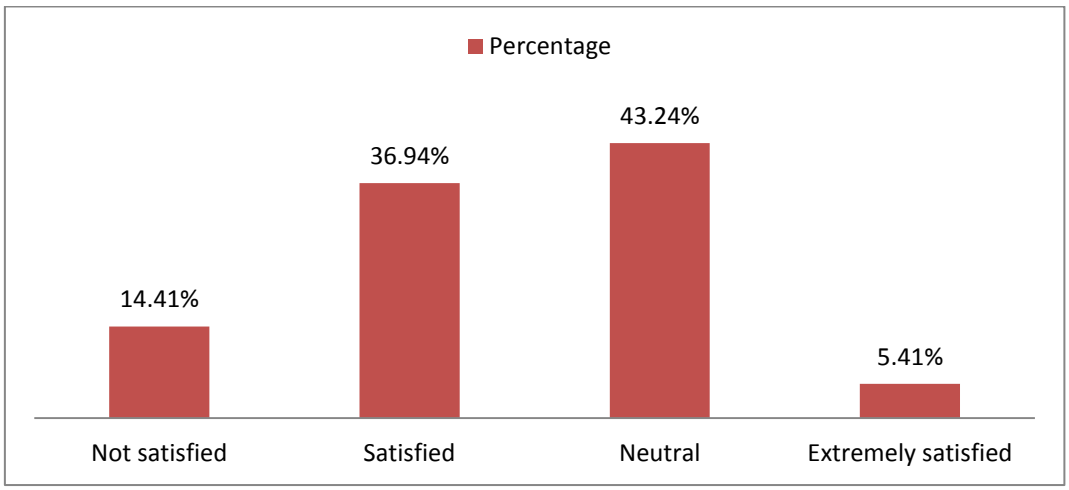

Figure 1-11: Views of learners regarding how satisfied they are with their current subjects

4.5.1 Would you like to have an association for student entrepreneurs in your school?

Figure 1-12 shows the views of the learners regarding the desire to have an association for student entrepreneurs in their schools. The results clearly show that 73 (65.77%) learners said 'yes', 35 (31.53%) learners said 'no' and 3 (27%) learners were unsure.

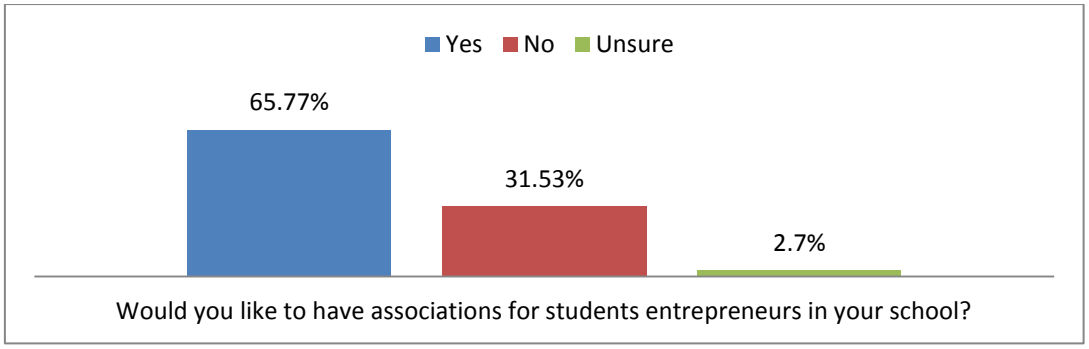

Figure 1-12: Learners' views regarding an association for student entrepreneurs in their school

Figure 1-13 provides the answer to the question that was asked to learners regarding whether or not they could draw up a business plan. Learners were given three options to answer the question: 'yes', 'no', 'unsure'. Six learners out of 111 said they could draw up a business plan (5.41%), 95 learners said they could not draw up a business plan (85.59%) and 10 learners were unsure (9%).

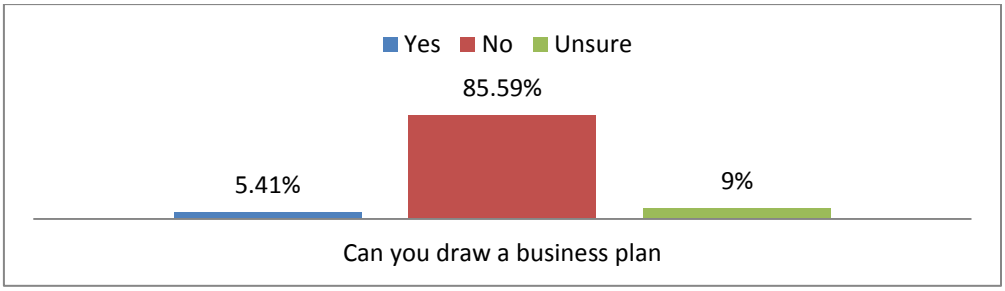

Figure 1-13: Learners' knowledge of drawing up a business plan

Figure 1-14 presents learners' views of the entrepreneur. The purpose of the question was to establish whether they think entrepreneurs are born or made. The five options given were strongly 'disagree', 'disagree', 'neutral', 'agree' and 'strongly agree'. Of the learners interviewed, 25 of them (22.53%) strongly disagreed with the idea of the entrepreneur's being born and not made, 43 learners (38.74%) disagreed, 26 learners (23.42%) were neutral, 12 learners (10.81%) agreed and 5 learners (4.5%) strongly agreed.

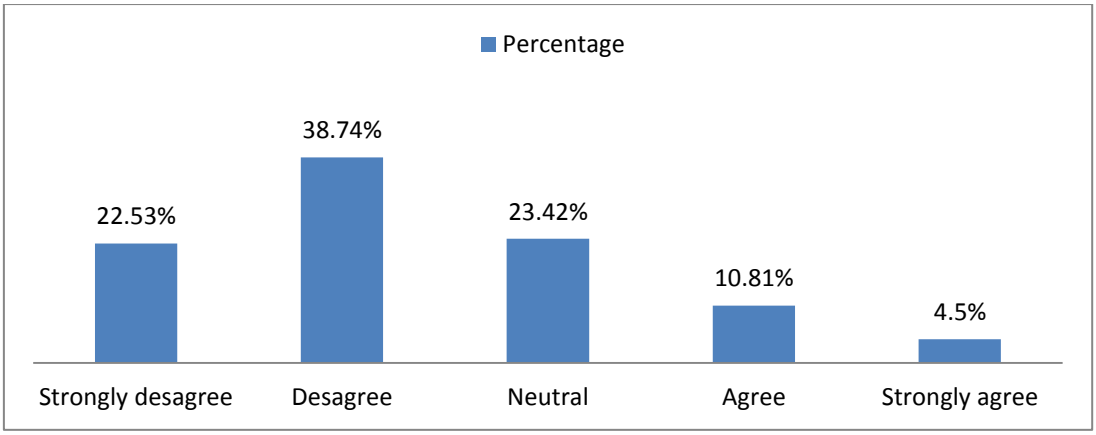

Figure 1-14: Learners' views on whether entrepreneurs are born or made

Figure 1-15 shows the views of learners regarding their skills for the possibility of starting a business at this point of their education. Thirty-four (30.63%) agreed that they could start a business as they felt confident about their skills, while 77 (69.37%) learners said they did not have the necessary skills yet and would need to know more about business before they embarked on one.

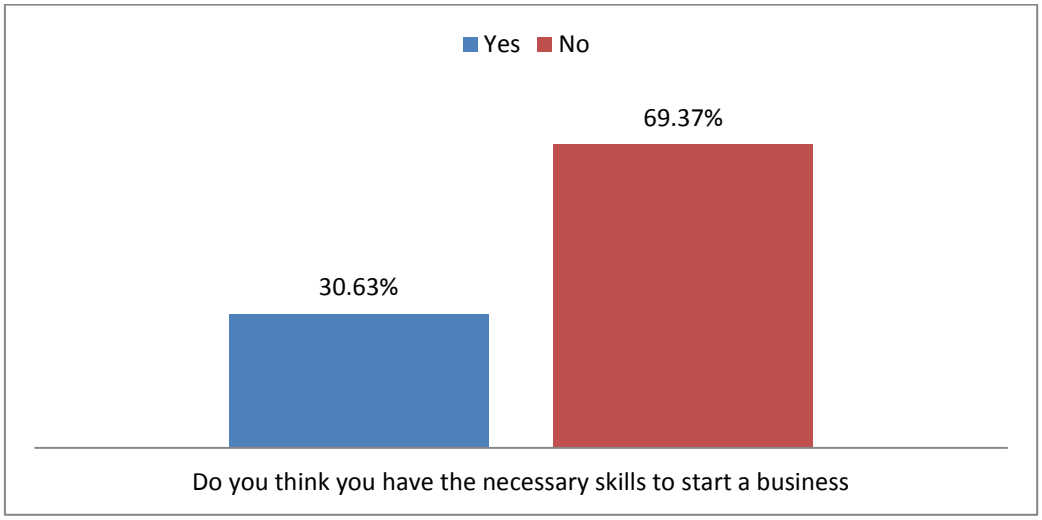

Figure 1-15: Percentage of learners who think they have the necessary skills to start a business

Figure 1-16 is a presentation of the learners' views regarding the relevance of their current subjects to their career goals. Given five different options, learners chose according to what they thought was the best answer. Seventy-six (68.47%) learners thought their current subjects were good but needed minor improvements, 8 (7.21%) learners thought the

subjects were poor and needed major improvement, 7 (6.31%) thought the subjects were totally irrelevant, 15 (13.51%) thought the current subjects were totally relevant and 5 (4.5%) learners did not give any answer.

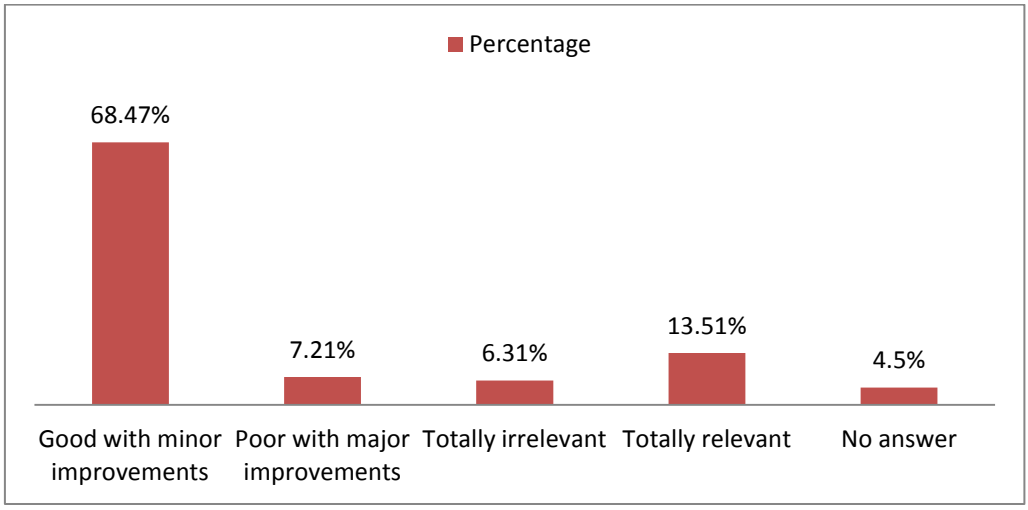

Figure 1-16: Learners' views on the relevance of their current subjects towards their career goals

4.5.2 What subjects should be taught and what teaching and learning methods should be used?

The subjects that should be taught if entrepreneurship education were implemented in Gabonese schools are business, accounting, marketing, and management. Apparently they are necessary.

Figure 1-17: Teachers' views of the subjects that should be taught for entrepreneurship education classes

When asked about the subjects and teaching methods for entrepreneurship education, Principal 1 said: 'I am not an expert in the domain but I think management, accounting and IT will be a good idea…' Teacher 2 (school B) added: 'We may not necessarily need to create new subjects. We could just add in commercial techniques and accounting, [and] some information about entrepreneurship to train them on how to start a business, since their current subjects are not that into business creation.' Principal 1 only spoke about teaching methods without putting a particular emphasis on new subjects: 'The programme will focus on practical activities and subjects such as marketing, accounting for all kinds of teaching, either general or technical. We will use case studies with real-life experiences.' In order to give learners a solid foundation in business, Teacher 2 (School A) felt that there was a need to talk about how to start up a business: 'We will teach everything from how to start a business to how to keep the business growing, with some lessons in marketing and management as well.' In addition, while Teacher 1 (School A) also thought that only some subjects could be added into the curricula ('I think some basic subjects … should be how to create a business, how to keep a business running'), the government official said: 'We necessarily have to redesign our curriculum … '

Figure 1-18 presents the responses of the learners regarding the adequacy of their current school curricula for a possibility of business creation after school. Fifty (45.04%) learners said the current school curricula was good but needed minor improvements, 18 (16.22%) said the programme was poor with major improvements necessary, 3 (2.7%) learners said the programme was totally adequate and needed no further improvements, 28 (25.23%) learners said the programme was totally inadequate and needed drastic improvements and 12 (10.81%) did not answer the question.

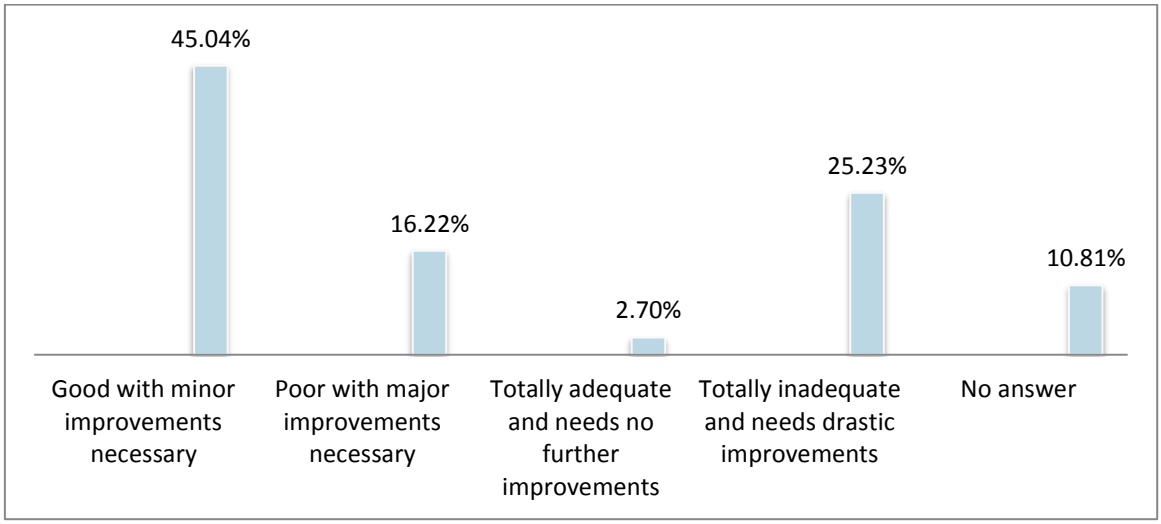

Figure 1-18: Learners' views on the adequacy of their current subjects

4.5.3 Do you have any ideas for starting a business?

Figure 1-19 shows the views of learners regarding their ideas for starting a business. Seventy-three (65.77%) said they had a business idea, 34 (30.63%) said they did not have any idea and 4 (3.6%) were not sure.

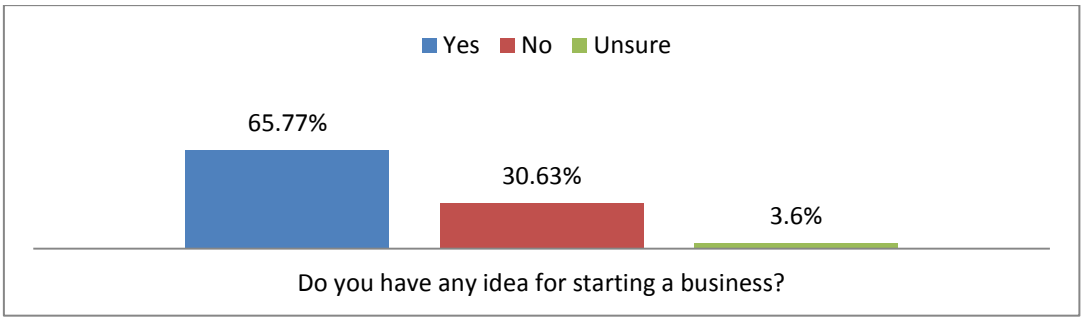

Figure 1-19: Percentage of learners who have an idea for starting a business

4.6 Object and outcome

Since the object was the main focus of the study, the researcher was interested in ascertaining what the participants knew about entrepreneurship education, and whether or not learners would be interested in the topic if it were taught.

4.6.1 Learners' awareness of entrepreneurship education (object)

Forty-eight (43.24%) learners said they had heard of entrepreneurship education, while 63 (56.76%) learners contended they had never heard of entrepreneurship education (as per Figure 1-20).

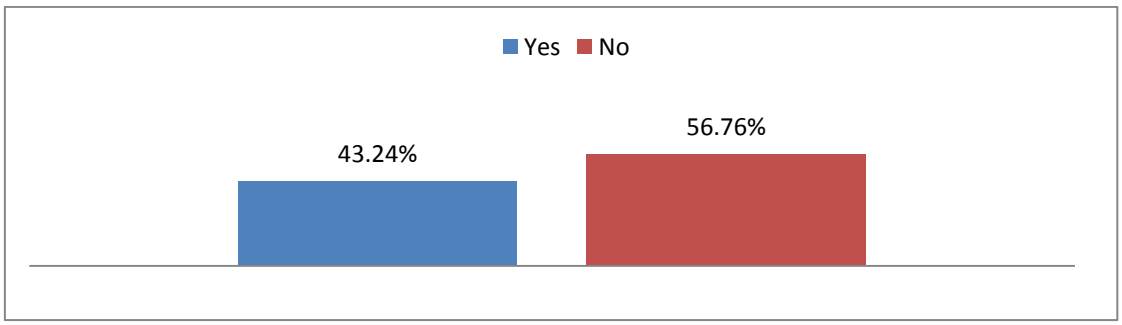

Figure 1-20: Learners' awareness of entrepreneurship education

Figure 1-21 illustrates the responses of learners regarding whether or not it would be a good idea to implement entrepreneurship education in Gabonese school curricula. Eighty-six (77.48%) learners agreed it would be a good idea, 21 (18.92%) thought it would not be a good idea and 4 (3.6%) were unsure.

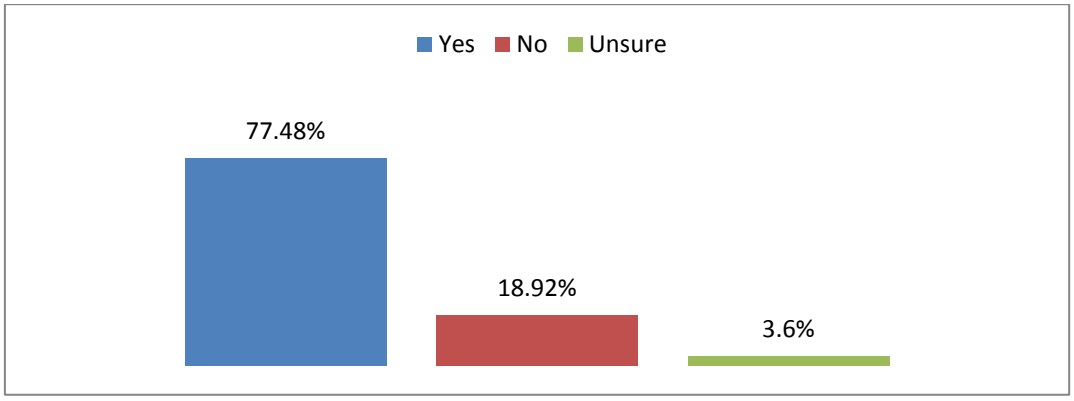

Figure 1-21: Learners' views on the implementation of entrepreneurship education in Gabonese schools

When questioned on the impact of entrepreneurship education on them, Teacher 2 (School B) answered:

> 'I truly believe that if learners have the knowledge of entrepreneurship and business creation in school, after [the] baccalaureate, many of them will be able to create their businesses and boost the economy of the country. So I truly believe that it will be a good idea to start teaching entrepreneurship to our learners.'

Teacher 1 (School C) added: 'Thanks to the teaching of entrepreneurship education to school learners, the Gabonese Economy will know [*sic*] an increase.' The economy of the country and the people of Gabon at large are counted as beneficiaries of entrepreneurship education and this reflects in the statement of Teacher 1 (School B): 'I think that such a programme [entrepreneurship education] will help solve the problem of unemployment.'

It is also discernible in the following statements: 'Such a programme will allow people or learners to create small businesses' (Teacher 2, School B). 'Active citizens will be trained and they will be able to develop the country with their business and raise the economy up.'

The government seems to be the only provider of employment so far: ‘Entrepreneurship education will have a positive impact on the Gabonese economy and the government will no longer be the only one to employ people as some will create jobs.’ (government official)

The figure below represents the responses of the teachers, principals and government official to the question of the impact of entrepreneurship education on the economy.

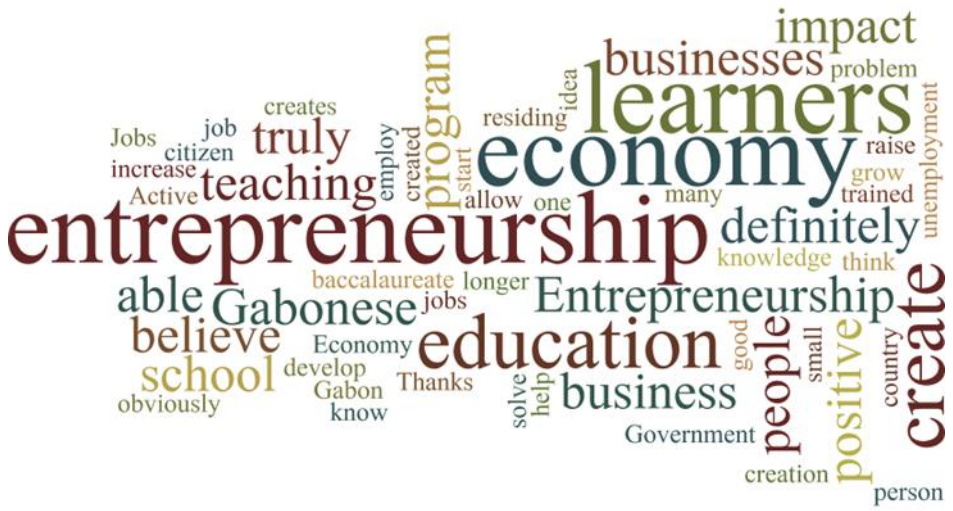

Figure 1-22: Teachers, principals’ and government official’s views on the impact of entrepreneurship education on the Gabonese economy

4.6.2 Is entrepreneurship education taught in Gabonese schools?

With regard to the object and the outcome, in response to the important question to establish whether entrepreneurship is taught in schools, Teacher 2 (School C) said: ‘We don’t directly teach entrepreneurship as a subject but in our commercial techniques lectures we touch on the 4Ps: product, price, promotion and place.’ In addition, the official from the Ministry of Education stated: ‘Learners are not really faced with information on entrepreneurship. So entrepreneurship is not yet taught in school simply because it’s not yet in our culture.’ Principal 1 affirmed that the actual subjects are not appropriate for potential entrepreneurs: ‘… the actual programme does not prepare the pupils to start their own business.’

The figure below shows the responses of the teachers regarding the teaching of entrepreneurship education in high school. The majority confirmed that entrepreneurship education was not yet taught in high school.

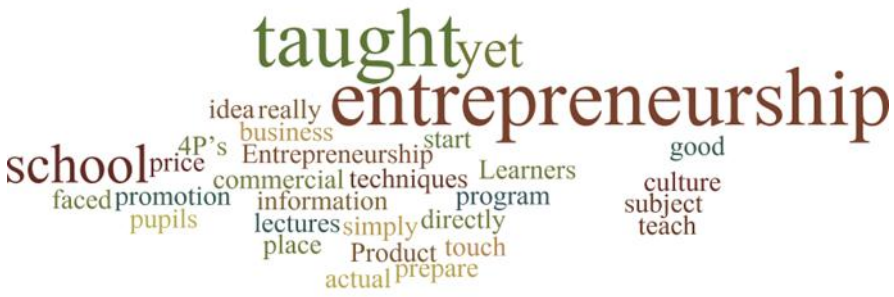

Figure 1-23: Responses of the teachers regarding whether or not entrepreneurship education is taught in Gabonese schools

4.6.3 Interest in entrepreneurship education

Regarding learners' interest in entrepreneurship education, views were shared. Principal 1 stated:

> 'Learners may not be interested, but if the programme is implemented they will have to adapt. It would be an advantage for them … today it is vital for secondary schools to insert business subjects in their programme …'

Teacher 2 (School A), on the other hand, felt: 'Everybody will be interested …' In agreement, teacher 1 (School B) said: 'Learners will certainly be interested in entrepreneurship education since the programme will be lively enough and address realities they face every day…'

While some participants said that entrepreneurship will be well perceived by learners, one said that not everyone will be fascinated by the programme though vital for them.

4.6.4 Learners' desire to become entrepreneurs

Figure 1-24 below represents the percentage of learners who would like to become entrepreneurs. According to the results, 56 (50.45%) learners wanted to become

entrepreneurs, 54 (48.65%) learners did not want to become entrepreneurs and 1 (0.9%) learner did not yet know yet at that stage if he/she wanted to become an entrepreneur.

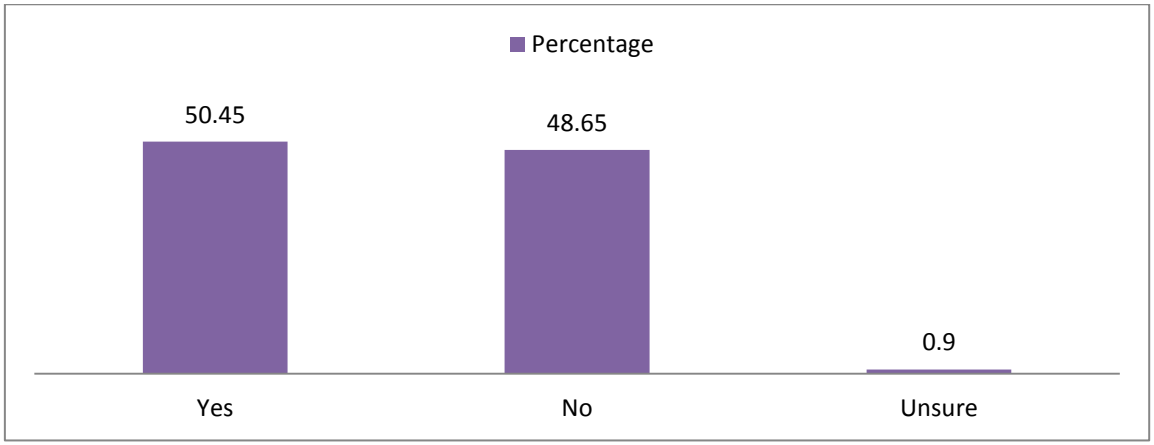

Figure 1-24: Learners' desire to become entrepreneurs

4.6.5 Learners' views on the necessity for entrepreneurship education

Figure 1-25 displays the views of learners regarding the necessity for entrepreneurship education in school. Eighty-seven (78.38%) agreed that it was necessary to study entrepreneurship, while 24 (21.62%) learners said it was not necessary.

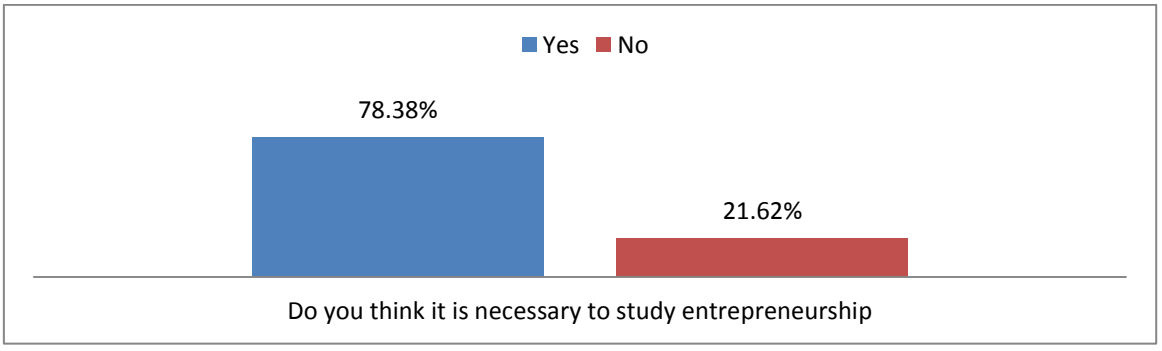

Figure 1-25: Learners' views on the necessity for entrepreneurship education in Gabonese schools

Figure 1-26 shows the percentage of learners who want to go to university after school. The results show that 2 (1.8%) learners did not want to go university after school, 11 (9.91%)

learners were not sure whether they wanted to go to university, look for a job or start a business, while 98 (88.29%) learners wanted to go to university.

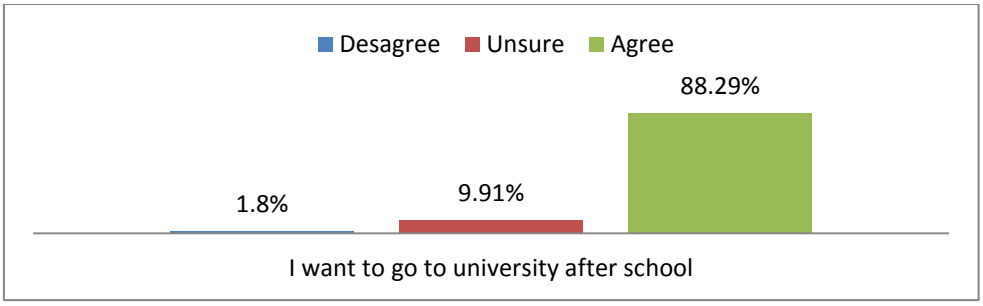

Figure 1-26: Percentage of learners who want to go to university after school

4.6.6 What do you want to do after school?

Figure 1-27 shows the percentage of learners who want to start a business after school. While 10 (9%) learners did not want to start a business straight after school, 90 (81.09%) were not sure whether they wanted to start a business, go to university or look for a job, and 11 (9.91%) learners wanted to start a business.

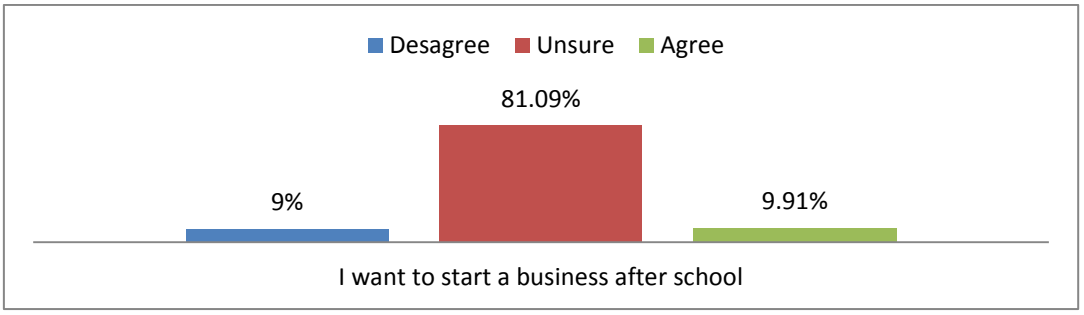

Figure 1-27: Percentage of learners who want to start a business after school

4.6.7 Learners' past or present involvement in business

Figure 1-28 is a presentation of the results regarding learners' past or present involvement in business. The findings show that 55 (61.05%) learners were or had been involved in business, 53 (58.83%) learners were not and had not been involved in business and 3 (3.33 %) did not respond.

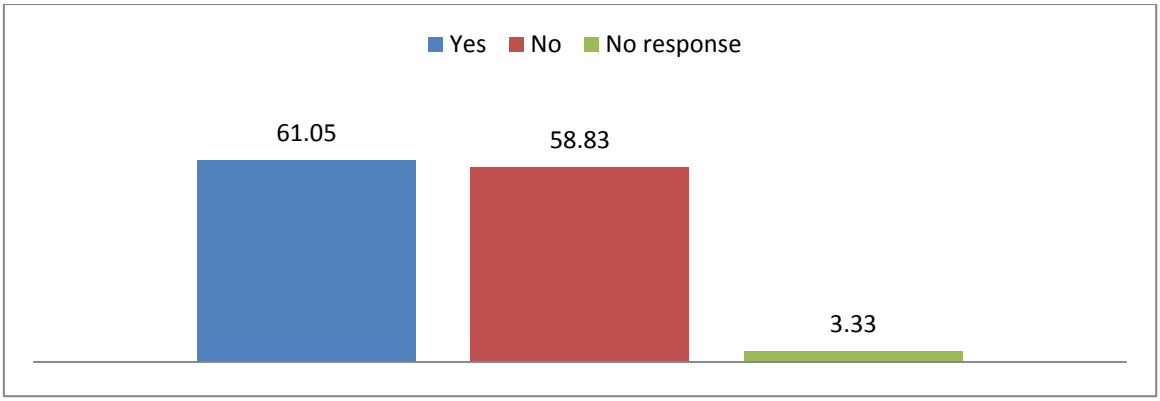

Figure 1-28: Learners' past or present involvement in business

4.7 Division of labour

As mentioned in Chapter three, division of labour or role division refers to the part each stakeholder plays in the implementation of entrepreneurship education in Gabonese schools. In this case, emphasis is placed on the role played by stakeholders principally involved in the conception of school programmes in Gabon.

4.7.1 The Ministry of Education

As the Ministry of Education is an important stakeholder in education, and more importantly in the implementation of entrepreneurship education, establishing its vision was necessary. When asked what the vision of the Ministry was, the government official replied:

> 'The vision of the Ministry of Education is necessarily to generalise entrepreneurship education, therefore make it accessible to all learners. To do so we necessarily have to redesign our curricula. Since the technical teaching classes are far advanced compared to the general teaching classes, we can start with those and implement them in the general [curriculum] later on.'

This quote addresses the fact that the Gabonese government is considering entrepreneurship education in school. They plan to introduce the programme to technical teaching school.

Teachers and principals who participated in the interview thought the government was trying to play its part: 'Already the government is trying by organising forums in entrepreneurship …' The Ministry is not the only one involved in the whole process of entrepreneurship education implementation, and the Government official added: 'The Ministry can only reinforce what already exists in terms of human resources, infrastructure, tools … however, implanting entrepreneurship education in secondary schools is doable.'

4.7.2 The role of the National Education Ministry in the implementation of entrepreneurship education programmes in schools

For entrepreneurship to be implemented, one should also consider the conception of the programme. One respondent thought it was the role of national education: 'I think the Ministry of Education will be responsible for the conception of the programmes' (Principal 1). Another respondent who seemed to have more detailed information on the role of the Ministry of Education in the implementation of Entrepreneurship education in school claimed:

> 'The Ministry of Education plays a very important role in the implementation of entrepreneurship education in school. They first of all make the decision to implement entrepreneurship education in school, and then they elaborate the programmes that schools must follow. Once the programme is put in place, teachers evaluate whether there are modifications to make. We could, for instance, suggest that learners be taken out to meet with entrepreneurs for a more positive impact.'

According to this quote, it is clear that the government understands their role in the implementation of entrepreneurship education in schools. After they have made the decision to implement the programme in school, it is the duty of teacher to make suggestions. Teacher 2 (School A) noted the equipment required for entrepreneurship education and thought that the Ministry should be able to support the initiative by making funds available: 'We will need more computers and that is where the National Education will be needed, for funds …'

4.7.3 Who is responsible for programme conception?

The figure below shows the responses of the teachers and principals regarding the question: "Who would be responsible for the conception of the programme for entrepreneurship education?" The majority said the Ministry of Education or the Pedagogical National Institute.

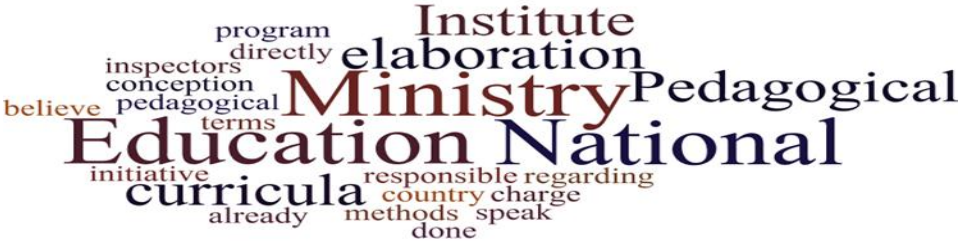

Figure 1-29: Teachers and principals' responses to whose responsibility it is to conceptualise the programme for entrepreneurship

When asking who would be responsible for the conception of the programme for entrepreneurship education, almost all responses indicated the Ministry of Education or the Pedagogical National Institute. Below are some responses of participants:

> 'I believe the Ministry of Education will be responsible for the conception of the programme.'
>
> 'The Ministry of Education and the Pedagogical National Institute in charge of the elaboration of curricula.'
>
> 'In our country elaboration of curricula is done by the Pedagogical National Institute directly under the Ministry of National Education.'

The quotes indicate that majority of teachers who participated in the study know that it is the role of the Ministry of education to conceptualise the programme for entrepreneurship.

4.8 Community

Community refers to learners, teachers, principals and the Ministry of Education. In this case, the emphasis is on learners, as they were the ones whose demographics were recorded.

Distribution of participants represents the percentage of participants in each school. School A had a percentage of 31% (35) participants, School B had 48% (53) participants and School C had 21% (23) participants.

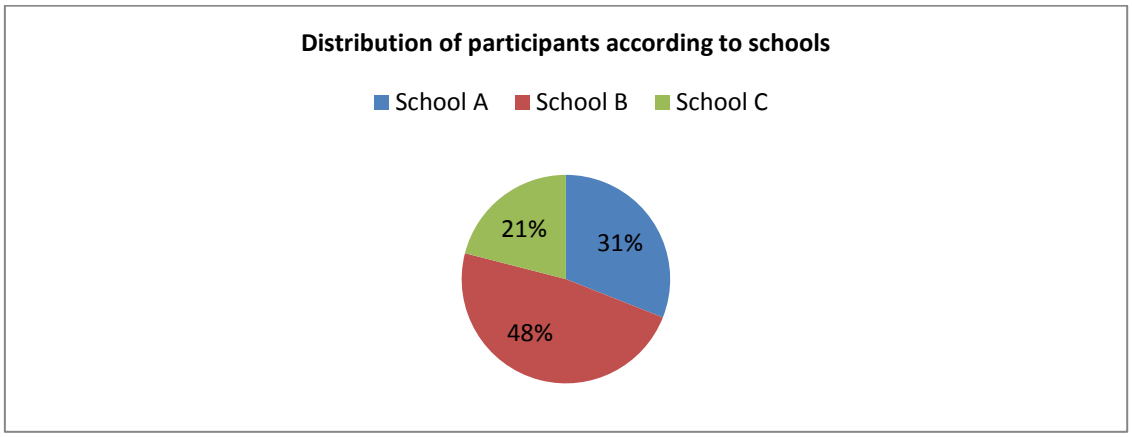

Figure 1-30: Distribution of participants according to schools

4.8.1 Gender distribution

Figure 1-31 represents gender distribution among learner participants. 52.25% (58) were female and 47.75% (53) were male.

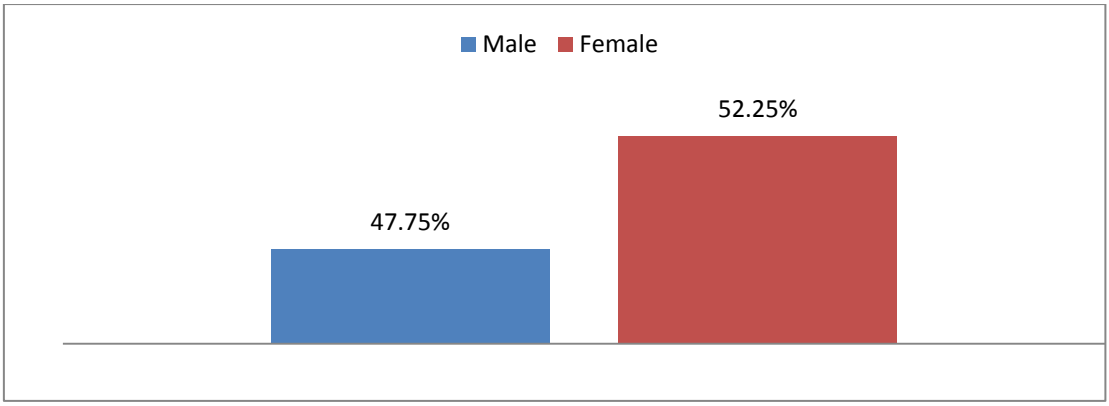

Figure 1-31: Presentation of gender distribution

4.8.2 Do you want to look for a job after school?

Figure 1-32 below shows the percentage of learners who wanted to look for a job after school. Although reasons were not provided, 21 (18.92%) learners did not want to look for a job after school, 83 (74.77%) learners were not sure whether they wanted to look for a job, start a business or go to university, and 7 (6.31%) learners wanted to look for a job after school.

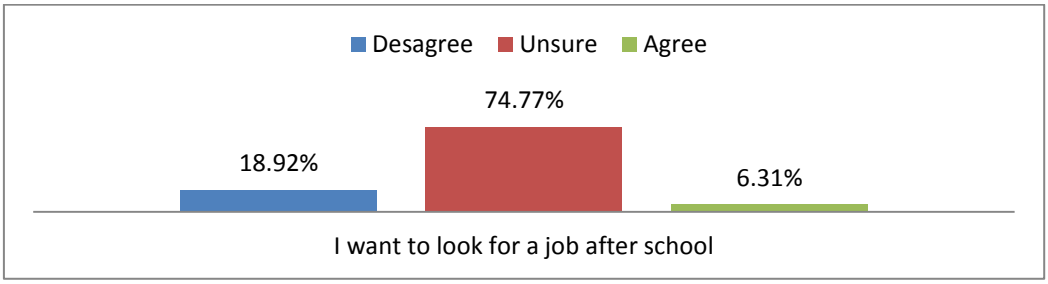

Figure 1-32: Percentage of learners who want to look for a job after school

4.8.3 Age distribution

Figure 1-33 below presents the age of each participant. According to the results, the majority (25 learners) of respondents were 20 (22.86%). One learner, on the other hand, was 26 (0.95%). Two (1.90%) learners did not mention their age.

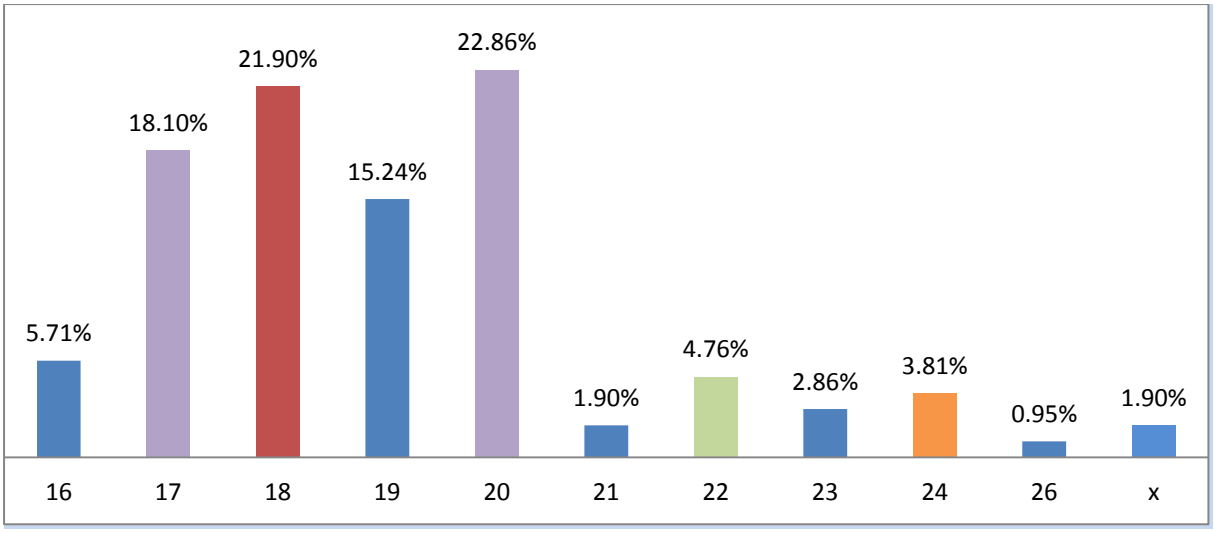

Figure 1-33: Presentation of age distribution among learners

4.8.4 Learners' views on their skills regarding job creation

Figure 1-34 below shows the learners' views on their skills regarding job creation. Thirty-four (30.63%) learners felt they had the necessary skills to start a business at this point of their education, while 77 (69.37%) learners thought they did not have the necessary skills to start a business yet.

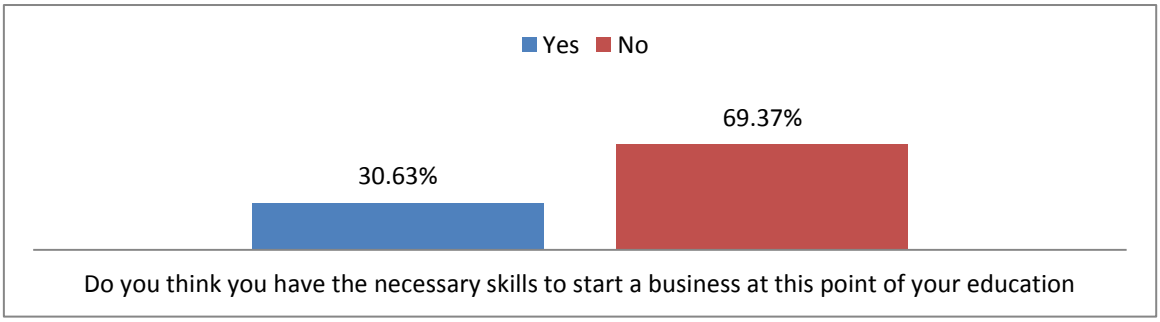

Figure 1-34: Learners' views regarding their skills to start a business

4.8.5 Are any of your family member entrepreneurs?

Figure 1-35 below shows the percentage of learners who have a family member who is an entrepreneur. Forty-four (39.64%) learners had a family member entrepreneur, 55 (49.55%) did not have a family member who was an entrepreneur and 12 (10.81%) were not sure. The results of a study conducted by Geldhof et al. (2013) reveal that the business career of some adolescents can be either positively or negatively influenced by one of their relatives.

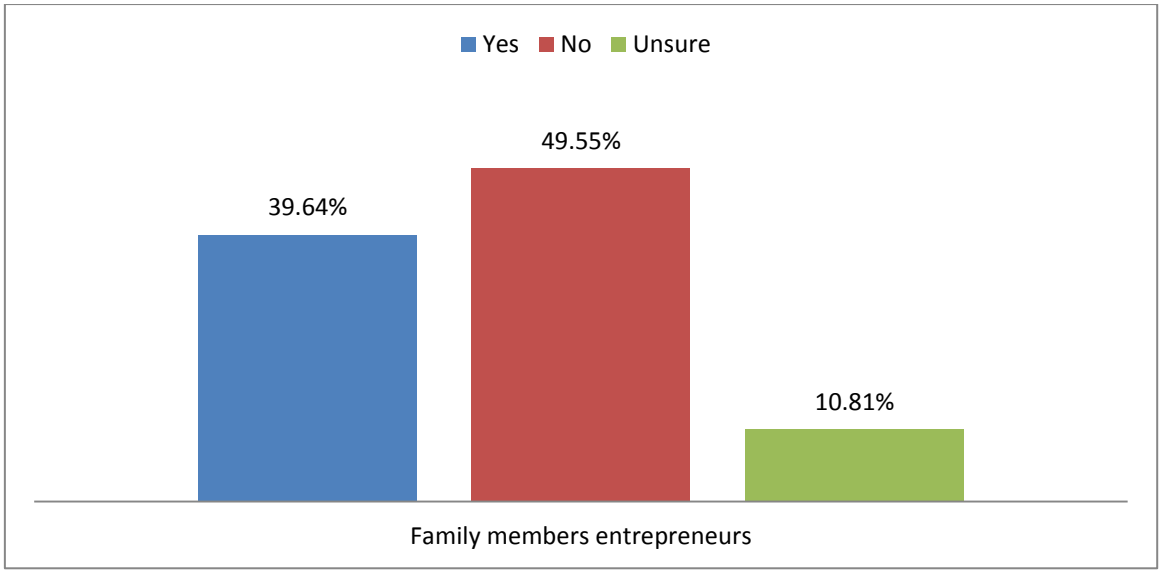

Figure 1-35: Percentage of learners who have a family member who is an entrepreneur

4.8.6 Learners' views on the path to their career goals

Figure 1-36 below shows the learners' views on the path of their career goals. It is noteworthy that this question was asked with regard to the current school curriculum.

Of the learners, 18.92% thought they were on the path of their career goals, 78.38 thought they were not on the path and 2.7% were unsure.

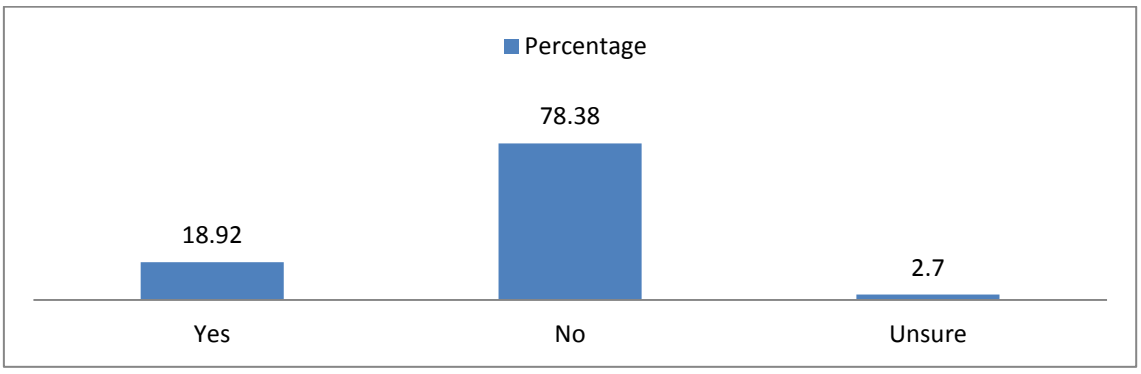

Figure 1-36: Percentage of learners who think they are on the path to their career goals

4.8.7 Do any of your friends in school want to own a business?

Figure 1-37 below shows the percentage of learners who have friends in their schools who want to own a business. Of the learners, 81 (72.97%) had friends in school that wanted to own a business, 29 (26.13%) did not have any friends in school that wanted to own a business, and 1 (0.9%) was unsure.

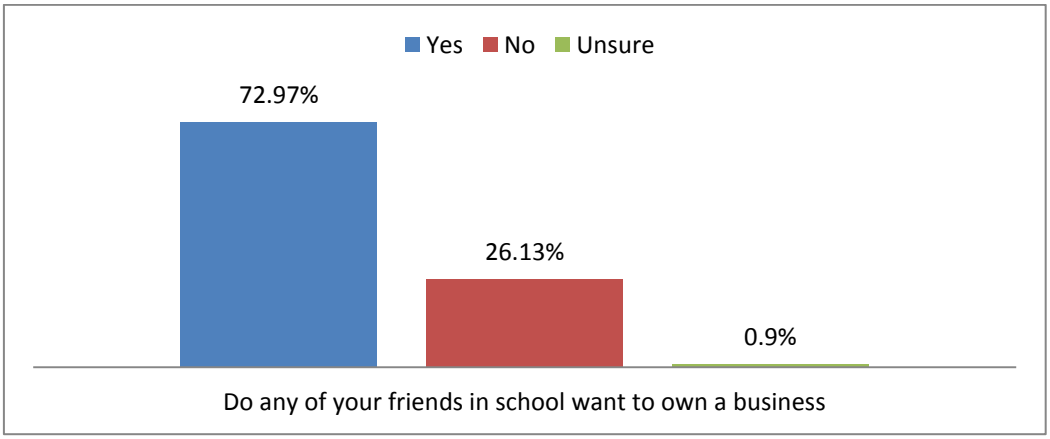

Figure 1-37: Percentage of learners who have friends in school who want to own a business

Figure 1-38 below shows the frequency distribution of career goals among learner participants. The researcher selected a few career options, allowing participants to choose the one they were interested in. However, since the list was not exhaustive, the 'other' option was also provided to allow those who did not choose any career goal to indicate the one they were interested in.

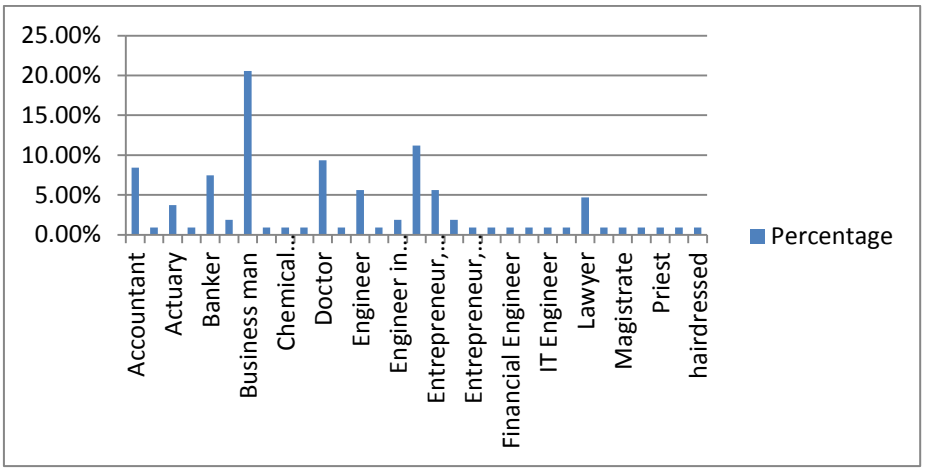

Figure 1-38: Frequency distribution of career goals

4.9 Rules

For entrepreneurship education to be taught in Gabonese schools, a project must be presented to the Pedagogical National Institute, in charge of the elaboration of the curriculum as mentioned by Teacher 1 (School B):

> In our country [the] elaboration of [the] curriculum is done by the Pedagogical National Institute, which is directly under the Ministry of Education. Nothing can be taught unless agreed by the Institute. They alone are responsible for that.'

This quote is an indication that entrepreneurship education cannot be implemented in Gabonese schools unless agreed by the Pedagogical National Institute which directly follows the instructions of the Ministry of Education.

In terms of funds, when addressing the issue, the government official stated:

> 'Currently the Ministry does not have a budget for the implementation of entrepreneurship education in schools but, for a budget to be allocated, the project must be presented by the Ministry of Education to the Ministry of Budget and Economics.'

The quote specifies that though it is the responsibility of the Ministry of Education to agree on and conceptualise a programme in entrepreneurship education for Gabonese schools, a budget has to be allocated by the Ministry of Budget and Economics.

4.10 Summary

This chapter dealt with the presentation of data. It appears that while some participants are conversant with entrepreneurship education, others are not. Education in Gabon is divided into two streams: general and technical. Most schools, however, follow the general stream, which offers basic general teaching subjects such as mathematics, French, English, philosophy, and economics. Among the three selected schools identified for this study, only one offers technical teaching, which includes subjects such as commercial techniques and economics of enterprises, in addition to the traditional subjects that every Gabonese high school offers.

The chapter covered the elements of Activity Theory: the role of the subject (teachers) in the transmission of entrepreneurship education to learners; the need for tools (material needed for entrepreneurship education teaching); and the object (the process of teaching entrepreneurship education and the results of the acquired knowledge). It also presented the rules pertaining to the implementation of entrepreneurship education in Gabonese schools, as well as the role of the community (learners, teachers, principals and Ministry of Education) as a whole, while addressing the role of each stakeholder.

For a better understanding of the results, a discussion based on previous literature is provided in the next chapter.

CHAPTER FIVE: DISCUSSION

5.1 Introduction

This chapter discusses the findings from Chapter Four, answering the research question formulated in Chapter 1, and using the Activity Theory framework. As stipulated in Chapter 1, the objective of this research was to determine if there is a need for entrepreneurship education in high schools in Gabon. To establish this, data were collected. Results discussed in this chapter will help determine if there is a need for entrepreneurship education in Gabonese schools.

The researcher had three particular objectives in mind when conducting the study. The first objective was to understand the level of understanding of entrepreneurship education at micro, meso and macro levels in Gabon. The second objective was to establish the necessity for entrepreneurship education in Gabonese school. The third objective was to link entrepreneurship education and job creation.

Although there is sufficient empirical data regarding entrepreneurship education in America, Europe, Asia and even Africa, limited data were found for Gabon, and most importantly, for Gabonese schools. For this reason, data collected for this study are essential and constitute an important tool in establishing the state of entrepreneurship education in Gabon. These data can be used to establish a foundation for entrepreneurship education in Gabonese schools.

As stated above, findings were arrived at according to the theoretical framework. Results are discussed according to the following elements: subject, tools, object and outcome, community, rules, and division of labour.

The following headings, directly related to the research sub-questions and objectives, were adopted:

Reasons for lack of entrepreneurship education in Gabonese schools: Participants' views of likely reasons:

- Conception of school curriculum: Participants revealed who is in charge of the school curriculum and who is involved.
- Interest of the community in entrepreneurship education: According to the findings, some members of the community are interested in entrepreneurship education while others are not.

- Entrepreneurship education in Gabonese schools and job creation: The findings revealed that there is a link between the two.

5.2 Subject

The subject is the teacher. Teachers are responsible for transmitting knowledge to learners (Osim et al., 2012:661); they therefore play an important role in this study to the extent that they are able to identify what they feel could be the reasons for the lack of entrepreneurship education in Gabonese schools.

5.2.1 Teachers' support for entrepreneurship education

Given the lack of entrepreneurship education in school, it is quite surprising that the teachers could still think of ways to support the programme if it were ever taught. This shows a particular interest in entrepreneurship education, which, as agreed by participants, will enable learners to support themselves in the future, based on their acquired skills in business.

According to the teachers participating in the study, learners are the centre of entrepreneurship education (see figure 1-9). Therefore, if learners do not show any interest in the programme, which is an important trait for entrepreneurs (Carsrud & Brännback, 2011:13), entrepreneurship education in school will be a waste of time. When asked, for instance, what the impact of teaching entrepreneurship education would be on the Gabonese economy, a teacher said:

> I think that entrepreneurship education will help solve the problem of unemployment. We will obviously have young people capable of getting jobs easily because they will create jobs for themselves. We live in a country where people do study, they get trained, but there are no job opportunities (Teacher 1, School 2).

This shows that at the moment, young people are still expecting the government to give them jobs. The frustration of teachers is expressed in the statement below:

> 'When we hear that this or that family is rich, it did not happen because the father worked for the government, but they started with a small family business and with years the family became rich. In Africa in heneral and in Gabon in particular we commonly think that we can only become rich if we work for the government, which is wrong.'

Even if the government were to offer jobs to every school graduate, Cheng et al. (2009:501) conend that "working for a company has become insecure".

Another point that highlights reasons for a lack of entrepreneurship in Gabonese schools is the statement: 'Teachers can support such an initiative by talking to our hierarchy about the importance of such a programme.' Not being in a position to take any decisions in terms of what is to be taught in schools, all teachers can do is to make suggestions. Based on this statement, it is assumed that the hierarchy, which includes the government, is still unaware that entrepreneurship education is teachable in school and important not only for learners but for the economy as well. Entrepreneurship education is important as it shapes the mindsets of young people while developing their entrepreneurial skills and knowledge (European Commission, 2012).

5.2.2 Training for teachers

Figure 1-10 illustrates the views of teachers regarding the need for teacher training in entrepreneurship and revealed the key words: *need*, *teachers*, *trained*, *business*, *entrepreneurship*, and *know*. A summation of these key words would be that teachers need to be trained in entrepreneurship and know business if entrepreneurship education is to be implemented in schools. If teachers are not familiar with entrepreneurship, it will be challenging for them to teach the fundamentals to learners, as there is no doubt that without teachers, entrepreneurship education is does not exist (Seikkula-Leino et al., 2010). Ruskovaara and Pihkala (2013:207) suggest that teachers be trained in entrepreneurship education. Training for teachers remains an important, if not the most important factor when it comes to implementing entrepreneurship education in school. Teachers need to understand the latest trends in business for them to transmit the information to learners, otherwise it will be difficult, if not impossible, for them to teach entrepreneurship education. Kadir et al. (2012:2170) acknowledge the necessity for teachers to equip themselves with academic entrepreneurial knowledge. Teacher participants argued that for them to be able to teach entrepreneurship education to school learners, they needed to go through the same training so they could familiarise themselves with the programme before engaging learners. This finding supports the view of Ruskovaara et al. (2015), in which entrepreneurship education in schools is reliant on the school and the teacher. The more the teacher knows about entrepreneurship education, the more he/she is able to interact with both learners and even other stakeholders in education regarding entrepreneurship education. Therefore, if the teacher does not have the necessary knowledge, it follows that learners will not acquire the knowledge.

5.3 Tools

Tools represent the necessary material, including textbooks, technology, and environment.

5.3.1 Satisfaction with current curricula

As indicated in figure 1-11, to determine their satisfaction towards their current subjects, learners were given four options: ‘not satisfied’, ‘satisfied’, ‘neutral’ and ‘extremely satisfied’. The majority of learners (48 in total or 43.24%) were neutral. The researcher believes that those learners refused to share their views for personal reasons, although it was stipulated in the questionnaires that their identity would not be disclosed.

5.3.2 Suggested subjects for entrepreneurship education

According to the teachers and principals, subjects that should be taught if entrepreneurship education were included in the programme are: business, accounting, marketing, and management (figure 1-17). This could mean that these subjects are key subjects in entrepreneurship education. However, while Moberg (2011:4) belives that courses for entrepreneurship education have not yet been identified, in South Africa, small business management, new venture creation, small business finance, franchising, family business, creativity management, venture capital, innovation, and technology have been identified as entrepreneurship courses. In sub-Saharan African universities, Kabongo and Okpara (2010:301) have identified introduction to entrepreneurship/small business management; entrepreneurial finance; entrepreneurial growth/feasibility analysis/creativity and innovation; business plan and entrepreneurship field project; product development; internships and corporate entrepreneurship; entrepreneurial marketing; and technology transfer. Although these subjects are aimed at university students, there is a possibility that they may be adapted for school learners. Moreover, financial literacy and group savings; entrepreneurial skills aimed at planning, launching and sustaining small businesses; goal-setting and decision-making; health and nutrition; and conflict management are a few entrepreneurship education subjects offered to Tanzanian and Ugandan secondary school leavers (DeJaeghere & Baxter, 2014:62). Teaching these subjects to learners would not only develop their technical skills but would also assist in improving their lifestyles.

Of the learners, 22.53% strongly disagreed with the statement that entrepreneurs are born and not made, while 4.5% strongly agreed with the statement. Despite the lack of entrepreneurship education in school, learners still attempted to answer the question. This is a demonstration of interest in the subject.

However, 23.42% of the participants were neutral. They considered that there was no need to display their lack of knowledge of entrepreneurship.

5.3.3 Views on necessary skills for business start up

Many learners think that they do not have the necessary skills to start a business. This is verified by the results shown in figure 1-34. When asked if they thought they had the necessary skills to start a business, 30.63% (34 learners) said they did not have skills, while 69.37% (77 learners) said they had the necessary skills. This could mean that some learners are already involved, or have, at some point, been involved in business, hence their knowledge of business and strong confidence in their business skills. This is verified by the fact that when asked if they were or had been involved in business, 61.05% of learners said 'yes', 58.83% said 'no', and only 3.33% of learners did not respond.

However, implementing entrepreneurship education in schools in Gabon will not only improve their knowledge in business but will also help future graduates identify business opportunities and create jobs in their communities (Ahmad, 2013:191). This was verified in Norway, where entrepreneurship education was offered at all levels of education to assist future graduates in securing jobs (Johansen et al., 2012).'

5.3.4 Learners' views on an eventual association for entrepreneurs in school

When asked if they wanted to have an association for entrepreneurs at their school, the results show that 73 (65.77%) learners said 'yes', 35 (31.53%) learners said 'no' and 3 (2.7%) learners were unsure. This is significant in terms of collaboration. When discussing entrepreneurship teaching approaches, Seikkula-Leino (2011:72) indicates a number of methods that reveal some kind of collaborative learning, such as cooperative learning, group and peer work, and school and business cooperation. Thus, having an association for entrepreneurs in school might develop collaborative learning. For instance, learners who already have some knowledge of entrepreneurship might want to share it with others and they might possibly work on a business project together.

5.3.5 Learners' ability to draw up a business plan

The responses to the question asking participants if they could draw up a business plan (figure 1-13) reflected that most of them did not know how to draw up a business plan, as only 5.41% of participants said they had this ability. Since little was revealed regarding whether or not learners were taught how to draw up business plans, the researcher cannot elaborate on the reasons for their inability to compile business plans.

5.3.6 Relevance of the current curricula

Participants were asked how relevant they felt their current subjects were to their career goals (figure 1-36). Of the learners, 76 (68.47%) felt their current subjects were good but

needed minor improvement, 8 (7.21%) learners thought the subjects were poor and needed major improvement, 7 (6.31%) thought the subjects were totally irrelevant, 15 (13.51%) thought the subjects were totally relevant and needed no further improvement, and 5 (4.5%) learners did not give any answer. These findings reveal that although the majority (76) of learners is happy with their current subjects, they still feel that something is missing. This indicates that learners are not totally satisfied with their current subjects. Teachers, on the other hand, acknowledge that the subjects currently offered to school learners do not train them for business creation. This is verified by a teacher's statement below:

> 'We may not necessarily need to create new subjects. We could just add in commercial techniques and accounting [and] some information about entrepreneurship to train them on how to start a business, since their current subjects are not that into business creation.'

The statement is in line with what DeJaeghere and Baxter (2014:63) say of entrepreneurship education, that is, school programmes' inability to assist graduates in obtaining employment. For the participant to identify a need for entrepreneurship education to assist learners to create jobs, he must have noticed that the average learner is unable to create a business if only applying the knowledge gained from current subjects.

5.3.7 Adequacy of the current curricula to learners' career goals

It is interesting to note that, just as in the previous findings, these findings reveal that more respondents (45.04%) said that the current curricula were suited to possible business creation after school, but they still needed minor improvements (figure 1-18). Only 2.7% of participants acknowledged the total adequacy of the current programme and an alarming 10.81% did not answer the question. The results display a need for business-related subjects that will augment what is already taught.

5.4 Object

Object, which is the focus of the study, is represented here by entrepreneurship education in Gabonese schools.

5.4.1 Learners' awareness of entrepreneurship education

When asked if they had ever heard of entrepreneurship education, 48 (43.24%) learners said 'yes' and 63 (56.76%) learners said 'no'. An assumption can be made that although a good percentage of learners (56.76%) have heard of entrepreneurship education, few really know what it is. According to Karimi et al. (2014:6), entrepreneurship and opportunity identification go together. Therefore, if learners do not hear about entrepreneurship in

school, they may not be able to understand opportunity identification, and as a result, may miss opportunities. Therefore there is a need for entrepreneurship education in school.

5.4.2 Do you think it would be a good idea to implement entrepreneurship education in school?

When asked if it would be a good idea to implement entrepreneurship education in school, 86 (77.48%) learners said 'yes', 21 (18.92%) learners said 'no' and 4 (3.6%) were not sure. These findings indicate that among the learners who participated in the study, a great number would be interested in entrepreneurship studies either to start a business straight after school or just to have a better knowledge and understanding of entrepreneurship education.

5.4.3 Is entrepreneurship taught in this school?

In response to the question to ascertain whether entrepreneurship was taught in their schools, teachers and principals generally answered that it was not yet taught (figure 1-23). This could mean that there is hope that entrepreneurship could be taught in schools to positively impact learners. However, a participant justified the fact that entrepreneurship is not taught in school by saying: 'entrepreneurship is not yet taught in school simply because it's not yet in our culture'. In support of the above findings, Principal 1 confirmed that the current subjects were not appropriate for potential future entrepreneurs, as the subjects were not business related.

5.5 Outcome

The outcome is the result, after entrepreneurship education has been implemented in schools. When asked what the impact of entrepreneurship education would be, teachers and principals agreed that it would definitely assist in increasing the economy of the country as learners would create their own businesses. Below are some salient answers:

5.5.1 The impact of entrepreneurship education

> 'Such a programme will allow people or learners to create small businesses' (Teacher, School B).
>
> 'Entrepreneurship education will have a positive impact on the Gabonese economy and the government will no longer be the only one to employ people, as some will create jobs' (government official).
>
> 'Thanks to the teaching of entrepreneurship education to school learners, the Gabonese Economy will know an increase' (Teacher 1, School C).

'I think that such a programme (entrepreneurship education) will help solve the problem of unemployment' (Teacher 1, School B).

These answers are summarised in figure 4-15. This shows that teachers and learners understand the role entrepreneurship education in school could play in the Gabone economy.

5.5.2 Learners' desire to become entrepreneurs

When asked about their desire to become entrepreneurs, 56 (50.45%) learners said they wanted to become entrepreneurs, 54 (48.65%) learners said they did not want to become entrepreneurs and 1 (0.9%) learner is not sure. These results verify the views of Kadir et al. (2010), that learners' choices of becoming employees, employers or even entrepreneurs are determined by their intent. At this stage, if learners have the desire to become entrepreneurs, it is believed that the teaching of entrepreneurship education in school will only encourage them more.

5.5.3 Learners' views on the necessity to study entrepreneurship

Learners were asked if they thought it necessary to study entrepreneurship. The results (figure 1-26) show that 87 (78.38%) learners agreed that it was necessary to study entrepreneurship, while 24 (21.62%) learners disagreed. When comparing these results with the previous ones, it is surprising to notice some contradiction. The percentage of learners who want to become entrepreneurs is just two percent higher than those who do not want to become entrepreneurs, yet the majority of learners (78.38%) considered it necessary to study entrepreneurship. Although as mentioned by Kadir et al. (2010) the intent of learners is important to their potential for entrepreneurship, some learners may want to study entrepreneurship without any intention of becoming entrepreneurs. This agrees with the findings of Lekoko et al. (2012:12025) who say that one of the reasons why learners want to study entrepreneurship is to acquire knowledge. Therefore, what was previously noted as a contradiction may simply be explained by the fact that among those (78.38%) who think it is necessary to study entrepreneurship are those who want to become entrepreneurs and the ones who just want to acquire knowledge.

5.5.4 Learners' desire to start a business after school

When asked if they wanted to start a business after school, results (figure 1-27) show that while 10 (9%) learners did not want to start a business straight after school, 90 (81.09%) were not sure whether they wanted to start a business, go to university or look for a job, and 11 (9.91%) learners wanted to start a business. This supports the previous findings in a

sense that not all learners want to start a business after school. They just want the knowledge that could help them in their future careers. Sánchez (2013:451) lists a number of psychological traits related to entrepreneurship: locus of control, propensity to take risk, self-efficacy, need for achievement, tolerance for ambiguity, and innovativeness. Although all these traits are essential if one wants to start a business, risk taking encapsulates the degree to which one is willing to be entrepreneurial (Sánchez, 2013:451). Moreover, Wiklund and Shepherd (2003) define risk taking as the desire to not follow the being-employed route to start initiatives with indeterminate results. Having said this, perhaps the reason why learners do not want to start a business after school is because they are not risk takers. They would rather be employed, use the entrepreneurial knowledge they acquired to perform better at work, and have certainty about their monthly salary, no matter how much it is, than start an unpredictable new venture.

5.5.5 Learners' interest in entrepreneurship education

Regarding learners' interest in entrepreneurship education, some participants thought learners might be interested, while others said not only learners would be interested, but everybody. Others claimed that even if learners were not interested at the beginning, they would ultimately be interested, as the programme would address their everyday concerns. 'Learners will certainly be interested in entrepreneurship education since the programme will be lively enough and address realities they face every day …' (Teacher 1 School 2).

5.5.6 Are you or have you been involved in business?

The findings presented in figure 1-28 show that 55 (61.05%) learners are or have been involved in business, 53 (58.83%) learners are not and have not been involved in business and 3 (3.33 %) did not respond. The results show that the majority of learners are or have been involved in business. This could mean that the learners who are or have been involved in business may want to study entrepreneurship to learn the theory to strengthen their businesses, especially those who would want to stay into business. However, although exposure to business is necessary, theoretical background is as important (Zhang et al., 2014:624) because it affects not only the intention to start a business but the success of the venture as well (Millán et al., 2014:612). This implies that combining business exposure and theoretical background in entrepreneurship is not the only recipe for entrepreneurial success.

5.5.7 Do you have any ideas for starting a business?

When asked if they had any ideas for starting a business (figure 1-19), 73 (65.77%) said they had a business idea, 34 (30.63%) said they did not have any idea and 4 (3.6%) were

unsure. This finding substantiates the above finding. If the majority have been involved in business, they must surely have business ideas.

5.6 Community

This section discusses the distribution of participants according to schools, gender, learners who want to look for a job after school, age, learners' views regarding their skills in respect of starting up a business, learners who have a family member who is an entrepreneur, learners who think they are on the path to their career goals, learners who have a friend at school who wants to own a business, and frequency distribution of career goals.

Learners were asked to indicate whether they belonged to School A, B, or C. Thirty-one percent were from School A, 48 percent from School B and 21 percent from School C. These numbers represent 74 percent of respondents.

5.6.1 Gender distribution

Learners were also asked to indicate whether they were male or female in the questionnaires. The results showed that 52.25 percent were female and 47.75 were male. The literature shows that teaching entrepreneurship education will increase learners' entrepreneurial leanings (Liñán et al., 2011). Therefore this researcher assumes that the results of the gender distribution could be due to women's growing interest in business in general and entrepreneurship in particular. However, since the gap between male and female participants in the study is not that big (4.5%), it explains the interest of men in business that has always existed (Kickul et al., 2007).

5.6.2 Age distribution

Although learners were asked to indicate their age, not all of them did. The results show that 1.90 percent did not indicate their age while the rest did. According to the results, 22.86 percent of the learners were 20 years old, while 0.96 percent of the learners were 26 years old. The findings indicate that age had no real effect on participants' responses, as they were all able to fill in the questionnaires according to their understanding. The researcher hoped to have participants aged 17 and above, but the findings revealed a minority (5.71%) of 16-year-old participants. Apart from the age limit of those participants, there was no significant difference in their responses compared with those of the others.

5.6.3 Would you like to look for a job after school?

The study was limited to schools offering both general and technical teaching, as these are the two streams of education that are offered in high schools in Gabon. After school, the

majority of learners choose to go to university (or college). Very few (according to their family financial background and support) will either look for a job or start a business. When asked how many wanted to seek employment after school, the findings revealed 18.92 percent do not want to go to school, 74.77 percent were not sure and 6.31 were willing to look for a job after school. This finding can be used to support the conclusion that very few learners are willing to search for employment after school.

5.6.4 Do you think you have the necessary skills to start a business?

There is a relationship between learners' skills in business and entrepreneurship and their choice to either go to university or engage in business straight after school. In response to the enquiry about their skills to start a business, 30.63 percent said they did have the requisite skills and 69.37 percent said they did not have the skills. This could be the reason for learners choosing to further their studies and go to university rather than starting a business or looking for a job. According to Ahmad (2013:195), one of the objectives of entrepreneurship education is to assist learners acquire skills to start and manage a business. This could be of value, whether one chooses to start one's own business or work for an organisation. Therefore this finding could imply the need for entrepreneurship education in school.

5.6.5 Are any of your family member entrepreneurs?

Family members could influence the choice to become entrepreneurs or pursue a career in business. According to Hadjimanolis and Poutziouris (2011:172), it more usual to find people who have a family member involved in business becoming entrepreneurs. Based on that, learners were asked if they had a family member who was an entrepreneur. The findings show that 39.64 percent had a family member who was an entrepreneur, 49.55 percent did not have a family member who was an entrepreneur and 10.81 percent were not sure whether they had a family member who was an entrepreneur or not. If, as mentioned by Geldhof et al. (2013), the career choices of adolescents can be influenced by family members' own career choices, then this particular result militates against the need for entrepreneurship education in Gabonese schools.

5.6.6 Are you on the right path towards your career goal?

When asked if they thought they were on the right path towards their career goals, 18.92 percent said 'yes', 78.38 percent said 'no' and 2.7 percent were not sure. The results demonstrate that many learners are not studying what they should be studying. Could it be that instead of traditional subjects like mathematics, French and economics, learners want something more business orientated?

5.6.7 Do any of your friends in school want to own a business?

Learners spend a lot of time at school; therefore they spend time with friends who can also influence their career choices. Based on this, a question was asked to establish if they had friends in school that wanted to own a business. Of the learners, 72.97 had friends who wanted to own a business, 26.13 did not have friends who wanted to own a business and 0.9 percent of learners were unsure, probably because they had never discussed careers with their friends. It is interesting to compare the responses to this question with the one regarding family member entrepreneurs. In this case, more learners have friends who want to own a business, while in the previous case more learners do not have a family member that is an entrepreneur. If learners spend more time at school and therefore with friends rather than with family, and more of them have friends who want to become entrepreneurs, possibly their interest in business will become stronger with time; hence the implementation of entrepreneurship education in school becomes a necessity. This supports Xie and Wang's (2014:85) view that society might affect students' desire to become entrepreneurs. In this instance, 'society' refers to other school learners.

5.6.8 Frequency distribution of career goals

The findings for the frequency distribution of career goals indicate that the majority of learners (20 percent plus) want to become businessmen, while the minority of learners (5 percent plus) want to become entrepreneurs. However, Segal et al. (2005:45) contend that the desire to become entrepreneurs (desired outcome) is not complete without the entrepreneurship propensity of the individual (what it takes to succeed as an entrepreneur) to predict an individual's intention to become an entrepreneur. These findings revealed learners' desires to become entrepreneurs, but their likelihood of becoming entrepreneurs is non-existent without entrepreneurship education. Could that mean that there is a need for entrepreneurship education in schools for learners to develop their skills in entrepreneurship and be equipped to succeed as entrepreneurs?

5.7 Rules

5.7.1 The role of the Ministry of Education in the implementation of entrepreneurship education

The responses of the participants reflected the importance of the Ministry of Education in the implementation of entrepreneurship education should it be required. When asked who would be responsible for implementing entrepreneurship education in the curriculum, the majority referred to the Pedagogical National Institute, which resorts directly under the Ministry of Education. This finding implies that the Ministry has the power to either promote or constrain

the implementation of entrepreneurship education in Gabonese schools. This finding agrees with the report of the National Board of Education of Finland (2004), where it is stipulated that the Finnish Ministry of Education, increasingly concerned about the development of the country, has introduced elements of entrepreneurship education into the National Core Curriculum for Basic Education.

5.8 Division of labour

5.8.1 Entrepreneurship education programme conceptualisation

In the responses of participants, there were indicators of the influence of the Ministry of Education. Figure 1-29, which represents the responses of principals and teachers to the question of whose responsibility it is to conceptualise the programme for entrepreneurship education, shows that most participants mentioned the Ministry of Education and the Pedagogical National Institute, although the Institute is an entity of the Ministry of Education.

5.8.2 The vision of the Ministry of Education regarding entrepreneurship education

The government participant reported that regarding entrepreneurship, the vision of the Ministry was to make entrepreneurship education accessible to all:

> 'The vision of the Ministry of Education is necessarily to generalise entrepreneurship education, therefore make it accessible to all learners. To do so we necessarily have to redesign our curricula since the technical teaching classes are far advanced compared to the general teaching classes.'

This statement emphasises the power dynamics of the Ministry.

5.8.3 Is funding available for entrepreneurship education?

In response to the question of funding, only one reply was recorded as it was only asked of the government official:

> 'Currently the Ministry does not have a budget for the implementation of entrepreneurship education in schools but a budget for project reform is available. For the budget to be allocated, the project must be presented by the Ministry of National Education to the Ministry of Budget and Economics.'

This finding indicates that there is a lack of funding for entrepreneurship education. In other words, teachers' suggestions with regard to entrepreneurship education to the hierarchy are relevant, as the government first hears about new reforms or projects, then presents the projects to the Ministry of Economics for them to allocate a budget. Then entrepreneurship

education is expected to develop in Gabonese schools. The inclusion of entrepreneurship education in schools has long been identified in Europe, Asia and America (Johansen & Schanke, 2013).

5.8.4 Significance of entrepreneurship education

If it is believed that entrepreneurship education encourages venture creation (Gerba, 2012:227), then there is no reason it should not be welcome in Gabonese schools because venture creation leads to economic empowerment (Prodromou, 2009:3). However, for young people to be interested and involved, they need to be taught entrepreneurship from an early age (European Commission, 2012:5). That may not totally discourage their desire to work for the government, but will definitely make an impact in shaping their skills while encouraging them to create some small businesses. People do not necessarily have to stop working for their government. They can, while working for the government, set up their own businesses. This has been demonstrated in China and can be done in Gabon. Some of the objectives of entrepreneurship education are to reduce unemployment, fight against poverty and develop the economy (Arogundade, 2011:27). It is believed that these objectives will also apply in Gabon once the programme is implemented. In other words, teaching the young Gabonese minds about entrepreneurship will not only boost their interest in creative thinking, but will also in the long run advance the economy of Gabon.

5.9 Summary

The findings revealed that there is a general understanding of entrepreneurship education, and its role and benefits to the country are not ignored. All stakeholders agreed that entrepreneurship should be included in the school curriculum, while learners suggested replacing an ossified currilum with something novel and more appealing. In other words, they all agree that there is a need for entrepreneurship education as it is acknowledged that it can empower one to create a business and fight against unemployment. However, it is clear that the introduction of a new subject and design of a new curriculum have financial and budget implications.

This chapter discussed the findings on entrepreneurship education, and employed elements of Activity Theory. When addressing the subject, teachers indicated the tools needed for them to succeed in the knowledge transmission of entrepreneurship. It appears that one of the most important is training in entrepreneurship education. They believe that once they have a basic knowledge of entrepreneurship, the object (the development of learners as entrepreneurs) will be easily assimilated with the combination of other tools such as

appropriate books and technology. The results also revealed that if entrepreneurship is to be implemented, though the teachers may make some suggestions, the final decision rests with the Ministry of Education and the National Pedagogical Institute.

The next chapter focuses on summarising and concluding the key points of the study, while making some recommendation for future studies and addressing some limitations.

CHAPTER SIX: SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

The study set out to identify if there is a need for entrepreneurship education in Gabon and establish reasons why entrepreneurship education is still not implemented in Gabonese schools. The study also sought to establish whether the teaching of entrepreneurship education could lead to job creation in Gabon to uplift the economy and eradicate unemployment. This research project intended to answer the following research questions:

- Reasons for the lack of entrepreneurship education in Gabonese schools: what, according, to participants could be the reasons.
- Conception of school curriculum: participants revealed who is in charge of the school curriculum and who is involved.
- Interest in the community in entrepreneurship education: according to the findings, some members of the community are interested in entrepreneurship education while others are not.
- Entrepreneurship education in Gabonese schools and job creation: the findings revealed that there is a link between the two.

6.2 Summary

To accomplish the goal and answer the questions of the study, it was necessary to understand some key elements such as entrepreneurship education in Africa in general and in Gabon in particular, as well as education in Gabon and entrepreneurship in Gabon. To reach that objective, a literature study was employed to ensure an understanding of the above-mentioned key elements. To provide an answer to the main research question, 'What are the needs that should be addressed so that entrepreneurship education in high schools in Libreville can be initiated?' while soliciting the views of each stakeholder in the education sector in Gabon, it was important to use the Activity Theory framework which is suitable for research related to education (Scanlon & Issroff, 2005) and which provides a better understanding of the role of each stakeholder. This chapter gives conclusions and recommendations emanating from this study.

Questionnaires were distributed to Grade 12 learners from three different schools in Libreville, Gabon, and two teachers and the principal of each school were interviewed as well as an active member of the Ministry of Education in Gabon. For confidentiality, no names of schools or participants were mentioned in the study.

Prior to the handing out of questionnaires to the learners and the interviews with participants, a signed and dated letter of consent was e-mailed to the researcher from the principal of each school. In return, a copy of the questionnaires and interview questions were sent to the participants for a holistic view of the content.

6.3 Conclusions

The aim of the study was to determine if there is a need for entrepreneurship education in high schools in Libreville, Gabon. To address the aim, a relationship between the three system levels in the management of schools (Hirsch, 2003) was established, and each level was consulted. They are presented in the study as stakeholders in the Gabonese education system.

The findings of this research have shown that the lack of entrepreneurship education is principally due to the fact that the Gabonese education system is based on two specific streams: general teaching and technical teaching. The general teaching stream allows learners to finish their school programme (while being taught traditional subjects such as mathematics, French, and economics), go to university, then graduate and look for a job; the technical teaching stream, on the other hand, involves learners in enterprise-related subjects such as commercial techniques, technical tools of communication and mechanical. Therefore, entrepreneurship education is not included in the curriculum although teacher participants from a technical school believe that some of their subjects, such as technical and commercial skills include some entrepreneurship and business-related notions.

However, learner participants expressed a need to study entrepreneurship, some to become entrepreneurs later on and others just to acquire some knowledge about entrepreneurship, thus fulfilling the view of Ahmad (2013:195), who believes that entrepreneurship education assists learners in acquiring skills to start and manage a business.

The findings have also shown that there is a need for entrepreneurship education. This is demonstrated by the fact that 69.37 percent of participants think they do not have the necessary skills to start a business. Studying entrepreneurship will develop their skills and encourage them to become entrepreneurs, since the majority want to become entrepreneurs and many think it is necessary to study entrepreneurship. The findings reveal that with no training for teachers, it will be difficult to implement entrepreneurship education. The results reflect the argument that without teacher training, entrepreneurship education is non-existent (Seikkula-Leino et al., 2010), as teachers are the ones transmitting the information. Training in entrepreneurship education for teachers will therefore herald the beginning of entrepreneurship education in Gabonese schools.

According to the participants, the curriculum was not designed for entrepreneurship and business studies. Therefore if entrepreneurship is to be taught in schools, there is a need to redesign the curriculum.

6.4 Recommendations

Regarding the lack of entrepreneurship education in schools, if learners want to learn about entrepreneurship, they should start getting involved. They can do so by seeking information from established entrepreneurs, and reading books about entrepreneurship education. They do not have to depend on their curricula to know what there is to know about entrepreneurship. They should be more organised, by forming an association for learner entrepreneurs at their schools where they will learn how to obtain finance to start a business, how to set up a business, and how to grow it. Learners should have entrepreneurial dispositions (Giacomin et al., 2011) before the government or anyone else can assist.

The curriculum designer should consider whether the actual curriculum is still working for all learners, considering changes such as globalisation. It is not just a matter of having a school curriculum, but having a school curriculum that matches the demands of society. Even if the intention is not to turn all learners into entrepreneurs, the skills will still help them achieve successful results in their careers as employees (Aziz et al., 2014:221).

With regard to teachers' lack of training in entrepreneurship education, while waiting for formal training, teachers could benefit by educating themselves through books and the Internet, and by consulting with entrepreneurs and through collaborative learning.

6.5 Limitations of the study

This study, however, has some limitations. Firstly, only registered learners participated in the study. It could have been interesting to hear from school leavers as well and learn their opinions about entrepreneurship education in school, since they are currently employed or unemployed. Secondly, although used by researchers to analyse data, Microsoft Excel is not so commonly used as SPSS, therefore may not be considered as rigorous. Perhaps SPSS would have mingled with the data better. Thirdly, a suggested school curriculum for entrepreneurship could have been considered in this study. The selection of only three schools may be considered a limitation. Another limitation was the use of wordle for qualitative data analysis. More rigourous software such as NVivo or MaxQDA could have been used to analysise the interview transcripts.

6.6 Scope for future studies

It is essential that future studies embrace school leavers as participants. Moreover, there is a need for future studies to use one of the commonly used statistical software packages such as SPSS. Additionally, the inclusion of more schools in the research may have provided different findings. Also, this study focuses on descriptive statistics. Future research could look at inferential statistics to determine relationship and comparison within the data. Finally, future research should suggest an entrepreneurship-related curriculum for Gabonese schools.

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APPENDICES

APPENDIX A: QUESTIONNAIRE

Dear Pupil,

My name is Jenny Pambault Enombo. I am a student of Cape Peninsula University of Technology in South Africa.

I am undertaking a needs analysis regarding Entrepreneurship Education in your school. I would appreciate it, if you could kindly complete all sections in this questionnaire. All responses will be treated with strict confidentiality and you will not be identified. Demographic data is required for statistical purposes only.

Thank you

Section A

Name of school

- College Paul Valery
- Lycee Djoue dabany
- Lycee de Nzeng Ayong

Gender

- Male
- Female

Age

- 17 Years Old
- 18 Years Old
- 19 Years Old
- 20 Years Old
- Other:

Section B

What is an entrepreneur?

What makes an entrepreneur different from other people?

Are any of your family members entrepreneurs?

- Yes
- No

Would you like to become entrepreneur?
Please tick the appropriate box

- Yes
- No

What is your career goal?
Tick the appropriate box

- Accountant
- Entrepreneur
- Banker
- Beauty therapist
- Business man
- Doctor
- Lawyer
- Archeologist
- Other:

Based on your choice above, do you think you are on the path of your career goal?
Please tick the appropriate box

- Yes
- No

Which business subjects are you offered in this school?
Please tick the appropriate box

- Communication skills
- Marketing skills
- Management
- Probability (mathematics)
- Economics
- Accounting
- Business studies
- Project management
- Other:

How satisfied are you with your current subjects?
Please tick the appropriate box

	1	2	3	4	
Not satisfied	○	○	○	○	Extremely satisfied

How relevant do you feel your current subjects are to your career goal?
Please tick the appropriate box

- ○ Totally relevant
- ○ Good with minor improvements
- ○ Poor with major improvements
- ○ Totally irrelevant

Do any of your friends in school want to own a business?

- ○ Yes
- ○ No

Do you think it is necessary to study entrepreneurship?

- ○ Yes
- ○ No

If you answered yes to the above question, please select the reason (s) from the appropriate box below

- ☐ I will be able to start a business
- ☐ I will have an understanding of business management
- ☐ I will have an understanding of entrepreneurship

Do you think you have the necessary skills to start a business at this point of your education?
Please tick the appropriate box

- ○ Yes
- ○ No

Are you or have you been involved in any type of business?

- ○ Yes
- ○ No

What do you think is needed to start a business?

	Strongly Agree	Agree	Unsure	Disagree	Strongly disagree
Finance (Funding)					
Marketing skills					
Creativity and innovation					
Entrepreneurship education programs					
Business opportunity detection					
Time management skills					
Practical operation of entrepreneurial opportunites					
Management skill					
Prior experience in business					
Help (e.g. advice) from other entrepreneurs					
An in-born talent for business					
Leadership skills					
Ability to work well with customers					
Financial skills					

What do you want to do after school?

Agree	Unsure	Disagree

	Agree	Unsure	Disagree
Go to university			
Start your own business			
Look for employment			

Would you like to have associations for student entrepreneurs in your school?

- Yes
- No

Do you have any idea for starting a business?

- Yes
- No

If you were to start a business, what kind of business will you do?

Can you draw a business plan?

- Yes
- No

Classify how adequate your current school curricula is for a possibility of business creation after graduation

- Totally adequate and needs no further improvements
- Good with minor improvements necessary
- Poor with major improvements necessary
- Totally inadequate and needs drastic improvements

In your opinion, entrepreneurs:

	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Are born and not made.					

	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Learn from teachers only.					
Learn from each other					
Learn from sharing and debating					
Learn from written text					
Learn by doing					
Learn by discovering					
Learn from a well organised environment with a fixed schedule					
Learn from mistakes					

Entrepreneurship education skills are:

	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Extremely important for the future					
Appropriate for some pupils					
Not appropriate for some pupils.					

Section C

What do you think entrepreneurship is?

	Strongly Agree	Agree	Neutral	Disagree	Strongly disagree
Taking risks.					
Success					
Identify an opportunity					
Having projective thoughts					
Leadership					
Coordination of resources for proper management of the organisation					
Anxiety					
Introduction to change					
Control					
Dynamo of economic system					
Innovation					
Rebellion					

Have you ever heard of entrepreneurship education?

Yes

No

If yes, what do you think it is?

Entrepreneurship education is:

	True	False
A training for future entrepreneurs		

	True	False
A preparation on how to run a business	○	○
Is skills taught to an individual to create in him/her the desire to own a business	○	○
For those who did not succeed in life and want to make money quickly	○	○
Educational process of acquiring entrepreneurial skills	○	○

What do you admire the most in entrepreneurs?

Do you think it would be a good idea to implement entrepreneurship education in your curricula?

○ Yes

○ No

What would you want to learn in an entrepreneurship education programme?

If an entrepreneurship education programme were to be offered in your school, what teaching methods would you prefer?

Please tick the appropriate boxes

☐ Teacher presents the content

☐ Research projects

☐ Group work

☐ Assignments

☐ Use of Case studies with real life examples

☐ Other:

Do you have any comments?

Thank you very much for your kind co-operation!

APPENDIX B: INTERVIEW QUESTIONS

Interview questions (government official)

My name is Jenny Pambault Enombo. I am a student of the cape Peninsula University of technology in South Africa.

I am undertaking a needs analysis regarding Entrepreneurship Education in your school. I would appreciate it if you could kindly complete all sections in this questionnaire. All responses will be treated with strict confidentiality and you will not be identified. Demographic data is required for statistical purposes only.

You have been identified as someone who could supply the necessary basic information for this research study pertaining to a needs analysis of entrepreneurship education in schools.

Entrepreneurship education can be viewed as the knowledge and skills taught to an individual, in order to create in him/her the desire to own a business.

1. How can the Ministry of education support the development of the awareness and skills necessary for developing an entrepreneurial mind set and skills in Gabonese schools?
2. Is entrepreneurship taught in schools? Please explain.
3. What is the vision and main objectives of the National Education Ministry regarding entrepreneurship education?
4. Do you think that entrepreneurship education programmes can make a difference in the future lives of pupils? Please explain.
5. What would be the benefit to society and to the economy if entrepreneurship education programmes were implemented in schools?
6. What are the requirements to design new curricula for the Gabonese schools?
7. Does the Ministry have funding for the implementation of entrepreneurship education in schools?
8. What other type of support (such as human resources and infrastructure, etc.) is the Ministry able to provide?
9. What will be the challenges of implementing entrepreneurship education programmes in schools?
10. Do you have any other comments?

Thank you very much for your kind co-operation!!

Interview questions (teachers and school directors)

You have been identified as someone who could supply the necessary basic information for this research study pertaining to a needs analysis of entrepreneurship education in schools.

Entrepreneurship education can be viewed as the knowledge and skills taught to an individual, in order to create in him/her the desire to own a business.

1. Do you offer any business subject in this school? Please explain.
2. Is entrepreneurship taught in this school?
3. If so, does the programme prepare the pupils to start their own business? Please explain.
4. If not, do you think that pupils will be interested in enrolling for an entrepreneurship education programme? Please explain.
5. What impact do you think entrepreneurship education at school level will have on the economy?
6. How can you, as a teacher, support the development of the awareness and skills necessary for developing an entrepreneurial mind set and skills in this school?
7. If an entrepreneurship education programme were offered, what subjects should be taught and what teaching and learning methods should be used?
8. Who would be responsible for designing the curriculum and what would they need to do?
9. What would be the role of the National Education Ministry in the implementation of entrepreneurship education programmes in schools?
10. What qualities should such a programme inculcate in pupils?
11. In your opinion, what are the essential characteristics that an entrepreneur should have and how will the programme address this?
12. What training and development will teachers need in order to implement the entrepreneurship education programme?
13. What will be the challenges of implementing an entrepreneurship education programme in your school?
14. Do you have any other comments?

Thank you very much for your kind co-operation!!