

**DETERMINANTS INFLUENCING THE PERFORMANCE OF
ENTREPRENEURSHIP EDUCATION IN PUBLIC UNIVERSITIES IN
KENYA**

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DECLARATION

This Thesis is my original work and has not been presented for a degree in any other University.

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DEDICATION

Special dedication to my dear loving wife Doris and my children Pince Muthuri, Joy Mwendwa, Clinton Koome and Clifford Mutuma for their encouragement and prayers during the time of my studies.

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I wish to pay tribute to my God for granting me peace, knowledge and sanity of mind that has enabled me to complete this research thesis. I wish also to register my appreciation to all those who assisted me to make this project a success.

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DEFINITION OF TERMS

- Attitude** A mental state of readiness, organized through experience, exerting an influence upon an individual's response to an object and the situations in which it is related (Pretorius, 2001)
- Curriculum** Set of courses and their contents offered at the school or university
- Dependent variable** Is the outcome variable the researcher is attempting to predict (Saunders *et al.*, 2003).
- Delivery techniques** It's the effectiveness of the teaching employed and the time allocated (Halfdam, 2002)
- Entrepreneurship**
- Education** Is the process or series of activities which aims to enable an individual to assimilate and develop knowledge, skills and values and understanding that are not simply related to a narrow field of activity but which allow a board range of problems to be defined, analyzed and solved (Niras, 2008)
- Enterprise training** Can be defined as a more planned and systematic effort to modify or develop knowledge, skills etc through learning experiences to achieve effective performance in an activity or range of activities (Thomas *et.al.*,1994).
- Effectiveness** Is the ability to achieve stated goals or objectives, judged in terms of both output and impact. It also involves undertaking the correct task (Niras, 2008)

Efficiency	Undertaking tasks in the way that it should be most economical in the use of resources (Niras, 2008)
Enterprise culture	It's a set of attitudes, values and beliefs operating a particular community that lead to enterprising behavior and aspirations of people toward self employment (Gibb, 1998)
Facilitator	Is the trainer who facilitate learning take place and is assumed to have the necessary skills, experience, and motivated. The trainer needs to use differing learning styles and teaching methods depending on the situation (Halfdam, 2002)
Impact	Refers to the results of a programme that is assessed with reference to its goals (Gichira&Bilikwana 2002)
Influence	A power something or course of events, especially one that operates without any direct or apparent effort
Intervening variable	Is also the outcome variable the researcher is attempting to predict (<i>Saunders et al.</i> , 2003)).
Learning	A process which is internal to the receiver not directly observable (Halfman, 2002)
Micro and Small Enterprise	(MSE) Businesses in Both Formal and Informal Sectors, Classified into Farm and Non-farm Categories employing 1-50 workers (GoK, 2005)

Obstacles	Awareness and motivation, resources both human and financial and demand for courses being higher than supply. (Niras, 2008)
Performance	Its measured by the elements such as motivation, entrepreneurial skills, business skills and the number of startups. Pretorius <i>et. al.</i> ,(2000)
Poverty	It's the state of deprivation of decent human life and reflected in the general well being of the population that disallows access to basic needs of individuals, households and local communities (ILO,2002)
Public university	Is a university that is predominantly funded by public means Pedagogical- The term refers to strategies of instructions or the style of instruction (Niras, 2008)
Teaching	Communicative activities with the aim to transfer knowledge and skills from one person to another through the presentation of a message a way that is understandable to the receiver (Noe, 2002).
Teaching Approaches	Include lectures, guest speakers, testimonial videos, tutorial ship, simulation, case studies, role models, business visits. (Sergio <i>et. al.</i> , 2000)
Training	It's a process that seeks to change the behavior of the trainee. It facilitates development o knowledge skills and attitudes (Noe, 2002).

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LIST OF ACRONYMS

MBA	Masters of Business Administration
KTTC	Kenya Technical Teachers College.
ILO	International labour organization
G.O.K	Government of Kenya.
MRTTT	Ministry of Research Technical Training and Technology.
MSE	Micro and Small Enterprise
TIVET	Technical Industrial & Vocational Educational Training
GDP	Gross Domestic Product
SME	Small and Micro Enterprise
JKUAT	Jomo Kenyatta University of Agriculture and Technology
CITC	Christian Industrial Training
UNDP	United Nations Development Programmes
UK	United Kingdom
NACH	Need for Achievement
IEE	Integrated Entrepreneurship Education.
EEP	Entrepreneurship Education Programme

ABSTRACT

The purpose of this study was to determine the factors that influence the performance of entrepreneurship education in public universities in Kenya with a view to instill entrepreneurship culture to enhance job creation and minimize poverty. The Specific objective were; to assess teaching approaches to entrepreneurship education, to find out the relevance of the entrepreneurship education curriculum, to assess the effectiveness of delivery of entrepreneurship education and the effects of entrepreneurship education on the target beneficiaries. In order to achieve the objectives of the study qualitative and quantitative research was used. The research design used in this study was descriptive survey. The target population was two hundred and fifty students and former students from JKUAT, Kenyatta University and University of Nairobi.

The sampling methods that were adopted were both probability and non-probability sampling. Since the study was concerned with the relationship between the identified dependent and independent variables, the regression and ANOVA analysis were used to analyze the relationship between them. The results of the ANOVA analysis shows there was a strong relationship between the variables of study and performance. All the Null hypotheses of the study which were tested were rejected, showing that a relationship existed between the four variables of study and performance.

From the results presented the lecturers for the undergraduate use mostly lecture method, followed by experience stories, discussion and the use of case studies and

guest speakers rarely used. Also lecturers prefer written classroom tests followed by term papers, group presentation and project work.

The researcher recommends incubation centers be introduced in all the public universities so that the students who come up with good ideas may be nurtured there. An association of the lecturers teaching entrepreneurship in public universities needs to be formed. This should include the representatives from the Private sector and other stakeholders to address the challenges faced when teaching entrepreneurship also entrepreneurship unit need to be introduced to the student when they are in the first year, so that they may develop the attribute necessary for self employment and change their attitudes early enough.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

Entrepreneurship is not new, and during the past number of years it has gained increased interest in research. This increased interest has emerged for a number of reasons, namely the recognition of the contribution of the small firms sector to economic development and job creation. Much of the economy's ability to innovate, diversify and create new jobs comes from small business sector. It is now recognized that development agencies, government departments, educational and training institutions are facing the challenge of how to create an enterprise culture which will further foster development of small firms. Many initiatives are put in place by development agencies and government institutions which provide valuable and much needed assistance to the start-ups firms in terms of advice and financial assistance. However, if new firms start-ups are to continue to increase, it is necessary to encourage and foster enterprise at an early age. This can be effectively auctioned through the promotion of enterprise through education (Thomas *et.al.*, 1994).

A wide range of factors have contributed to the revival of interest in entrepreneurship and small business in both Europe and the USA since 1990s. In recent years, many industrialized countries have suffered from economic recession, high unemployment rates and fluctuations in international trade cycles to a degree not experienced since World War II. This situation has tended to increase the attention paid by policy makers and political decision makers to the potential role of

entrepreneurs as a possible solution rising unemployment rates and as a recipe for economic prosperity particular interest is being focused on the role of small business both because of its ability to adapt to a changing environment and because its structure allows it to adjust itself to technical change at a rate fast enough for survival. Many countries have now recognized this and are preparing new policy measures to support small firms and entrepreneurship. Specific efforts are also being directed at promoting innovative activities and to improve innovative capabilities. It is now widely accepted that, the future prosperity hinges on the creation of vibrant indigenous business that are deeply rooted in the local economy. For this to occur there is need to expand the pool of local entrepreneurial talent to develop and manage new business ventures. For the aspiration to become a reality, effective support structures are required to harness local initiatives and nurture new enterprises that are capable of creating sustainable employment (Thomas *et.al.*, 1994) .

There is much discussion about the possibility of developing entrepreneurs. Some biographies of successful entrepreneurs often read as if such people entered the world with an extraordinary genetic endowment. But there are almost as many counter stories of those who hit on the entrepreneurial jackpot without the benefit of genetics. It is clear that these traits and genetics do not fall into any sensible pattern of start-up success. Successful new ventures are as much the result of a driving entrepreneur with an abundance of luck and timing. For one to be successful its important to come from entrepreneurial parents, to gain work experience and adequate education (Gibb, 1987).

In a survey by Vesper (1986) of American Professors 93 per cent of respondents indicated that entrepreneurship education could be taught. Hill (1988) in his research survey of 15 teaching university entrepreneurship educators, found that their main educational objectives was to increase the awareness and understanding of the process involved in initiating and managing a new business. It is often argued that enterprise culture is developed naturally, however, due to the changing environmental conditions we cannot solely rely on this passing on of knowledge resulting in the need to provide the intervention to promote this culture. Education can be viewed as an important intervention. Various studies, suggest that the entrepreneurial role can be culturally acquired and therefore this prompts the questions: Does the present educational system encourage the concept of an enterprise culture. Grant (1986) referred to the concern of a number of educationists that the educational system places too much emphasize on the acquisition of knowledge and the ability to analyze it. Not enough is placed on helping students acquire particular skills and to use knowledge.

McMullan and Long (1987), suggests that instructional methodology is not well suited to aspiring entrepreneurs therefore the curriculum should acknowledge this. When education is linked with desirable behavioural outcomes, then some very close parallel can be draw between it and entrepreneurship. McMullan and Long (1987) argue that in order to provide effective entrepreneur education, students should deal with ambiguity and complexity. They must learn how to design solutions and should have substantial hands on experience working with small firm sector. While it is perceived that entrepreneurship can be taught, it is critical to ensure quality teaching is implemented and in doing this be aware of the barriers that exists.

That the entrepreneurial role can seemingly be culturally and experientially acquired indirectly gives support to the view that might also be influenced by education and training interventions. When education is linked with desirable behavioural outcomes, then this is where some very close parallels can be drawn between it and entrepreneurship. Entrepreneurship education is supposed to instill knowledge, skills and attitudes. In most formal education situations, the first is treated thoroughly and in an analytical manner, the second receives sketchy attention and is harder to impact within formal educational systems. The third is hardly addressed at all. Yet this later topic of attitudes, the psycho-social forces of the individual and the cultural context, is of prime importance in influencing innovative and entrepreneurial behaviour patterns. If entrepreneurship education and training is to be effective, the contention is that it must be so not only through factual knowledge and the limited skills acquired in the classroom, but also through the stimulation of new ventures, the success of those ventures and the increasing capacity of the entrepreneur to pursue even greater success.

The most commonly cited objectives of entrepreneurship education include: Demonstrate positive attitude towards self-employment: Identify viable business opportunities, portray a desire to venture into business, demonstrate managerial skills for running a successful business enterprise, apply managerial competencies in business situation, understand the factors likely to affect the success of a business, to encourage new start-ups and other entrepreneurial ventures (Thomas *et.al.*, 1994).

The importance of small enterprises in the Kenya economy was further emphasized in the Small Enterprise and Jua Kali Development in Kenya (GoK ,1992). In this paper, policy measures to improve the MSE environment were put in place. These measures were addressing gender specific issues, accessibility to credit facilities and provision of non-financial training, counseling and consulting, marketing extension, and programme design on the use of technology and quality production.

According to GoK (2005) the Government was to encourage universities, Polytechnics, Technical Institutions and other MSE support organizations to develop certified demand driven courses on entrepreneurship and business management in order to improve and promote the acquisition of entrepreneurial development programmes in schools and other training institutions in order to develop a widespread enterprise culture. Training has been identified as one of the intervention tools through which small enterprise can be promoted. One of the most striking changes that have occurred in Kenyan training institutions during the 1990s has been the introduction of entrepreneurship education. This is now being offered in all vocational and technical institutes from youth polytechnics to national polytechnics. The programme is serviced by the Master of science in entrepreneurship at the Jomo Kenyatta university of Agriculture and Technology and a higher diploma in entrepreneurship at Kenya Technical Teachers College (Namusonge, 1999); and Moi University where an Masters in Philosophy degree in entrepreneurship has been running since the late 1990's.

In 2009 the number of public universities stood at 7 as compared to 24 private universities. The private universities composed of 11 chartered, 4 registered and 9 with letters of interim authority. The total number of TIVET institutions stood at 805. The number of youth polytechnics stood at 754, institutes of technology 23, Technical Training Institutes 24, National Polytechnics 2 and Polytechnic University Colleges 2. As of 2009 the total enrollment in TIVET institutions was 71,513 as compared to 85,200 in 2008. The low enrollment was due to upgrading of Kenya Polytechnic University College and Mombasa Polytechnic University College status in 2009. The Youth polytechnics had the highest enrolment recorded among TIVET Institutions at 43.8 per cent followed by Technical training institutes of 31.4 per cent. The Current National Polytechnics are Kisumu and Eldoret with a total enrolment of 6,999 students (GoK, 2009).

1.2 Problem Statement

Lack of basic skills in business management and entrepreneurship is a major drawback in the growth and development of the MSE sector. The integration of entrepreneurship training into the country's education system, exposure of potential MSE entrepreneurs to modern business skills and the creation of an environment that permits MSE businesses to emerge and flourish has been a major challenge. The traditional approach to vocational and technical training has not addressed this need because there exists no provision in their curricula for appraising the programmes at business start-up, survival and growth stages to establish the extent to which their programmes are demand driven, value adding and address the specific needs of the

operators and beneficiaries. In addition, most of the institutions providing entrepreneurship and business development training suffer from inadequate capacity. They are, therefore, unable to offer training in a wide range of trades. Consequently, potential entrepreneurs enter the sector ill prepared to effectively contribute to its success, while existing ones remain latent in their operations GoK (2005).

Strategic entrepreneurship development and promotion of an enterprise culture can produce a mass of creative and innovative Kenyans capable of developing into high profile entrepreneurs and industrialists especially among women and youth, who constitute the majority of the population (Namusonge,2010). Self employment and micro and small enterprises creation are therefore the routes that young people can actively explore to forge their future. micro and small enterprises are the places where the jobs are. Promoting a positive enterprise culture through entrepreneurship education is one of the ways to facilitate youth employment.

According to Nelson and Mburugu (1991), one approach to enhancing entrepreneurial activity and enterprise growth in developing countries is to create an “enterprise culture” among the youth of the country by focusing on them while they are still in school, this approach may provide a long term solution to the problem of job growth. To achieve the widespread “enterprise culture” in the long run, education and training programs in Kenya must integrate business, technology, self employment and entrepreneurship into the curriculum. This idea was supported by the presidential working party on education and manpower training for the next decade and beyond (GoK,1988) which recommended that entrepreneurship training be taught in all technical training institutions. An entrepreneurship approach can be used to harness

the tremendous amount of human resource and institutional capabilities that exist in Kenya for faster economic development. This is possible through inculcating an enterprise culture that prepares the population to take advantage of the abundant business opportunities and provides supportive measures for enterprises irrespective of their levels of development to realize their potential.

Enterprise culture is significant in employment creation in that it involves development of positive attitudes, values, beliefs, behaviour and practices towards self employment and business creation. It is expected to increase the pool of potential entrepreneurs and participation of young professionals and skilled graduates from education and training institutions into self employment activities. A good foundation of enterprise culture is also expected to lead to increased rural and urban incomes thereby alleviating poverty and unemployment for the majority of the Kenyan population. Enhancing levels of innovation and entrepreneurship to grow a more competitive economy is the focus of much government effort. Universities aware of the importance of developing entrepreneurial potential, are focusing on equipping students with the skills and understanding to contribute to business creation and to innovation within organizations they join, through the provision of transferable skills (GoK,2007).

Due to the proliferation of entrepreneurship and training courses in colleges and universities, there is no much feedback on the usefulness of the programmes especially on the pedagogical approaches, curriculum contents, methods of delivery and the entrepreneurial behavior of the target beneficiaries. There is, therefore, need

to look at all these determinants for effective delivery of entrepreneurship education and the effects on the target beneficiaries. Hence the study therefore focused on the determinants that influence the performance of entrepreneurship education in public universities in Kenya, in order to instill entrepreneurship culture to enhance job creation and minimize poverty.

1.3 Research Objectives

1.3.1 General Objective

The overall objective of the study was to explore the determinants influencing the performance of entrepreneurship education in public universities in Kenya.

1.3.2 Specific Objectives:-

In order to fulfill the research aim, this study intended to:

- a) Assess the effect of pedagogical approaches to entrepreneurship education performance used in public universities.
- b) Find out the relevance of the entrepreneurship education curriculum on performance in public universities.
- c) Assess the delivery mechanism of entrepreneurship education on performance in public universities.
- d) Find out the effects of entrepreneurship education performance on the target beneficiaries.

1.4 Research Questions

This research study seeks to answer the following research questions

- a) What are the effects of pedagogical approaches to entrepreneurship education performance used in public universities?
- b) How relevant is the entrepreneurship education curriculum adopted on performance in public universities?
- c) How effective is the delivery mechanism of entrepreneurship education on performance in public universities?
- d) What are the effects of entrepreneurship education performance on the target beneficiaries?

1.5 Research Hypotheses

To examine how each of the criterion variables influences the response variable, the following null hypotheses were tested.

Hypothesis 1: entrepreneurship education has no impact on the target beneficiaries

An induction into the topic of entrepreneurship such as innovation and new product development, idea generation, market research, feasibility study, financing the start up business failure. Those topics enabled students gain the necessary knowledge and skills to start a business. also by understanding and knowledge in the above topics should reinforce innovation ,creativity, flexibility, self expression to identify and respond to different markets opportunities. The impact on target beneficiaries was measured in terms of the ability of the students to identify a viable business, identify

sources of financing the business, business plan written, management structure put in place, competitive strategies used, legal provisions complied ,marketing strategies and creativity within their businesses. The hypothesis was tested using the regression analysis.

Hypothesis 2: There is no relationship between teaching approaches and the acquisition of entrepreneurial skills.

The approaches used to generate increased effectiveness in the behavior of students , which result in existing skills enhancement of the development of new skills include the use of active case studies, group discussions ,problem solving , simulations, teamwork, projects, lecture, guest speakers, testimonial videos, business attachment and business plans.

Regression analysis was used to test the hypothesis to find out weather the teaching approaches have a relationship with acquisition of entrepreneurial skills.

1.6 Justification of the Study

One of the problems facing the Kenyan economy is unemployment. This is due to low economic growth, rampant corruption, nepotism and the negative attitude towards entrepreneurship. Approximately 500,000 graduates enter the job market annually from various tertiary academic institutions. Very few of these graduates can be absorbed in the labour market because of the weak economic performance and the public sector reforms, which have adversely affected employment in Kenya, majority of the youth remain unemployed (GoK, 2002).

Enhancing levels of innovation and entrepreneurship to grow a more competitive economy is the focus of much government effort. Universities aware of the importance of developing entrepreneurial potential, are focusing on equipping students with the skills and understanding to contribute to business creation and to innovation within organizations they join, through the provision of transferable skills. There has been an increased interest in entrepreneurship within the education system and the society in general, with an increase in courses, incubators and other activities oriented to promote the area of entrepreneurship. This phenomenon happens in both public and private universities and technical institutes. There was therefore need to explore determinants influencing performance of entrepreneurship education in Kenya.

1.7 Significance of the Study

The study sought to provide information on the determinants influencing the performance of entrepreneurship education in public universities in Kenya , by identifying the pedagogical approaches used, finding out the relevance of curriculum, assessing the delivery mechanism of entrepreneurship education and the effects of entrepreneurship education performance on targeted beneficiaries.

The findings of this study was expected to be of great use to a number of organizations namely : These are the government , universities and colleges, researchers, curriculum developers, and the community.

1.7.1 Government

The government will use the recommendations of the study in order to formulate the appropriate policy that is applicable for the entrepreneurship education in Kenyan universities and other training colleges. Also the government will know whether the attitudes of the students are changing from white collar mentality to self employment. The information obtained from the study can be used by the economic planners who require knowledge of pedagogical approaches used in the public universities. The government needs to be involved in nurturing good ideas through incubation to saleable products by providing the necessary infrastructure, finance and marketing facilities.

1.7.2 Researchers and curriculum developers

Those who are involved in the study of the sector will use the results at the same time know the areas that require further research. The findings will also provide a reference base for other researchers who will use the information as primary data. The results will also supplement other studies that have been done on entrepreneurship. Curriculum developers will use the findings of the study in order to develop the entrepreneurship curriculum that is appropriate to the students. The research will also be an eye opener on syllabus designers; they may find a need to redesign the syllabus at the university level.

1.8 Scope of the study

The study was limited to the students of Jomo Kenyatta University of Agriculture and Technology (JKUAT), Kenyatta University and Nairobi University. The reason for concentrating the study in those universities was because they have been teaching entrepreneurship skills at undergraduate, Masters Degree and at PhD in entrepreneurship. Many students have graduated from those universities who are playing major roles in the country as lecturers, consultants, entrepreneurs, curriculum developers, researchers and as administrators.

1.9 Limitations of the study

Mugenda and Mugenda (1999) define a limitations as an aspect of the study that the researcher knows may negatively affect the results or the generability of the results but over which he /she probably has no control. Most of them have to do with size, length of the study or data collection procedures.

Due to limited time the researcher was not able to use face-to-face interview in which the interviewer was engaged in an informal and relaxed discussion and therefore able to give more information. So the researcher used other methods like the questionnaires. The problem is that the respondents may have failed to respond to the questionnaires effectively by giving false information that would have affected the results. The other problem of the questionnaires is that the data are affected by the characteristics of the respondents that are memory, knowledge, experience, motivation and personality.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter reviews the relevant literature. It is organized under the following parts: entrepreneurship a global perspective, history of entrepreneurship in Kenya, promotion of enterprise culture, theoretical framework, conceptual framework, hypotheses testing, thematic model, assessment of entrepreneurship courses, it ends with a presentation of the existing gaps and summary .

2.2 Entrepreneurship a global perspective

Entrepreneurship education has grown and received recognition by many universities and colleges in North America as an academic field (Kuratko, 2003). It is in the USA that the field has achieved the greatest growth rate . Entrepreneurship and small business education has exploded to more than 2200 courses, 277 endowed positions, 44 referred academic journals, mainstream management journals devoting more issues to entrepreneurship and over 100 established and funded centers. This indicates that entrepreneurship education is well catered for in the USA, as far as the educational infrastructure for entrepreneurship is concerned (Kuratko, 2003). In most USA universities, entrepreneurship courses are offered at both the undergraduate and graduate levels and some of those schools offer four or more courses that lead to concentrations, majors, and degrees in entrepreneurship (Dana , 1992).

According to Menzies (2003), entrepreneurship education in Canada is not well supported in terms of endowments as compared to USA: endowed chairs in entrepreneurship are much less common in Canada, The creation and development of entrepreneurship centers as part of university entrepreneurship education is a relatively recent but growing phenomenon, and incubators are not popular at university due to their cost of operation. However, one of the most interesting developments in entrepreneurship education in Canada has been the growth of ACE (Association of Collegiate Entrepreneurs) Clubs at most universities and some colleges.

Compared to the evolution of entrepreneurship education in the USA, interest in entrepreneurship education in Europe is relatively new. However, as pointed out Dubbin ,2004 this trend is changing and courses about entrepreneurship have grown steadily in all the main countries in Europe . Embedding entrepreneurial courses in university curricular is advocated by several academic and governmental studies. A survey by Wilson, 2004 reveals that entrepreneurship courses remain primarily electives at European universities at both undergraduate (73%) and postgraduate level (69% electives). They also tend to be offered in stand – alone courses, rather than being integrated across the curriculum. Entrepreneurship courses are found to focus on start-ups, business planning, SMEs, family business, business strategy, innovation and the entrepreneurship environment. Concerning support mechanisms, European universities provide a variety of entrepreneurship related activities and services such as coaching for start-ups, business plan writing competition, student’s internships and

incubation facilities. However, contrary To the USA, successful entrepreneurs in Europe rarely give back by funding centers of chairs (Wilson, 2004).

2.3 Entrepreneurship Education in Kenya

Interest in development of entrepreneurship and small enterprise in Kenya, gained momentum as a possible remedy to the stagnation of economic development and the escalating unemployment problem since the late 1960s and early 1970s. The ILO report of 1972 highlighted the absence of an enterprise culture in Kenya's indigenous inhabitants. It was noted that most of the businesses were owned by non- Kenyans of Asian or European origin, with only a few African businessmen most of whom could be found in the informal petty trade sector. An attempt by the government to correct this saw the introduction of the move towards Africanisation of businesses, and training of existing small traders and industrialists. This was in spite of the fact that there were no comparative studies which analyzed the entrepreneurial tendencies of the various groups that is Asian, European, and African. Neither were there studies which documented or explained the gradual entry of Kenyans into the business sector and especially the large business sector, to guide policy and programme on who the most likely successful entrepreneurs were. The Kenya Government responded with a Sessional paper (GoK, 1974) on employment which recognized the role of entrepreneurship in employment creation, not just in the informal sector but also in the formal sector. In the subsequent development plans have devoted time to development of strategies and plans on small scale enterprises and entrepreneurs.

The Kenya government set up various committees and commissions to reveal the educational system and training opportunities. Among them include Mackay report on

the presidential working party on the second university in Kenya of 1981 which made the recommendations including a change of education system from seven four two three to the current eight four four system. At every level of education, cycle, were erected to have scientific and practical knowledge that could be utilized for self employment.

The Presidential working party on education and manpower training for the next decade and beyond of 1988 recommended the streamlining of Technical Industrial Vocational Education and Training (TIVET) management under one authority and the introduction of entrepreneurship education to facilitate ease of entry into self employment. The current Kenyan education system is based on the 8-4-4 system, eight years in primary school, four years in secondary school and four in university.

The seventh national development plan (1994-98) correctly points out that all aspects of human development benefit from entrepreneurship. An entrepreneurship approach can be used to harness the tremendous amount of human resource and institutional capabilities that exist in Kenya for faster economic development. This is possible through inculcating an enterprise culture that prepares the population to take advantage of the abundant business opportunities and provides supportive measures for enterprises irrespective of their levels of development to realize their potential.

The (GoK,2005), the government was to encourage universities, polytechnics, technical institutions and other MSE support organizations to develop certified

demand driven courses on entrepreneurship and business management in order to improve and promote the acquisition of entrepreneurial development programmes in schools and other training institutions in order to develop a widespread enterprises culture.

The majority of poor Kenyans do not get beyond primary school. A number of primary schools also known or 'academies' have cropped in through the urban areas. These academies cater for middle and high-income families who make up a small percentage of the Kenyan population. On the other Side of the urban areas, there are the informal primary schools which are also community based / nongovernmental schools located in the slums (Biruri, 2006).

In 2009 the number of public universities stood at 7 as compared to 24 private universities. The private universities composed of 11 chartered, 4 registered and 9 with letters of interim authority. The total number of TIVET institutions stood at 805. The number of youth polytechnics stood at 754, institutes of technology 23, Technical Training Institutes 24, National Polytechnics 2 and Polytechnic University Colleges 2. As of 2009 the total enrollment in TIVET institutions was 71,513 as compared to 85,200 in 2008. The low enrollment was due to upgrading of Kenya Polytechnic University College and Mombasa Polytechnic University College status in 2009. The Youth polytechnics had the highest enrolment recorded among TIVET Institutions at 43.8 per cent followed by Technical training institutes of 31.4 per cent. The Current National Polytechnics are Kisumu and Eldoret with a total enrolment of 6,999

students. In 2009, the male student enrolment stood at 50.2 per cent in TIVET institutions with Youth Polytechnics having a higher enrolment of female students of 57.8 percent. Total enrolment in all the universities stood at 177,735 students for the academic year 2009/2010. Enrollment in Public universities increased from 100,649 students in 2008/09 academic year to 142,556 students in 2009/10. In 2009/10, the male and female student's enrolment in public universities was 98,611 and 52,945, respectively. Past time students in Public universities constituted 32.0 per cent of the total student enrolment in 2009/10 academic year. Student enrolment in Private accredited universities accounted for 19.8 per cent of the total university student enrolled in 2009/10 academic year. The public universities student intake through the Joint Admissions Board (JAB) increased by 23.4 per cent from 17,000 in 2008/09 to 21,100 in 2009/10 academic year. The increase in intake was attributed to establishment of constituent Colleges which significantly increased access to university education. The population of female student enrolment in university education declined from 40.1 percent in 2008/2009 to 37.9 percent in 2009/10. In order to enhance female enrolments JAB has an affirmative policy of admitting female students with a score lower than their male counterpart. However the gender disparity in university education enrolment remains high with a gender parity index of 0.61 based on student enrolment (GoK, 2010).

The first pre-start up training course in entrepreneurship development for micro and small enterprises was started at Kenya Technical Teachers College (KTTC) in 1990 using financial resources from UNDP. The trainees were expected to build capacity of

the Ministry of Research Technical Training and Technology (MRTTT) to promote entrepreneurship in technical institutes and polytechnics. The course was then institutionalized at JKUAT in 1992. The overall goal of the program was to provide learners with knowledge and skills to serve as trainees, researchers and administrators of programming supporting small enterprise development. A subsidiary goal was to equip learners with skills to enable them to start and develop their own enterprises (Nelson & Johnson, 1997).

2.4 History of university of Kenya

University education in Kenya started with the establishment of the Royal Technical College of East Africa in Nairobi through a Royal Charter issued in September 1951. The college was to produce technical and commercial personnel for the countries of East Africa. At the same time, The Asian community in East Africa had formed the Gandhi Memorial Academy with the aim of planning and building a college of higher learning in Arts and Science in Kenya as a living memorial to Mahatma Gandhi. There was therefore, in higher education, the same form of partnership that characterized the other levels of education (Nguru,2006). This however did not last long as the Gandhi Memorial Academy was merged with the Royal Technical College of East Africa. The first students to enter the college were admitted in April 1965. The Royal Technical College became the University College , Nairobi, following the establishment of the University of East Africa with three constituent colleges in Nairobi, Dar-es-salaam and Kampala (Makerere). The university of East Africa offered programmes and degrees of the University of London till 1966. In 1970, The University of East Africa was dissolved to create three autonomous universities of

Nairobi, Dar-es-salaam. The University of, Nairobi was thus established as the first university in Kenya (Nyaigotti, 2004).

2.5 Promotion of Enterprise Culture

The (GoK,2007) correctly points out that all aspects of human development benefit from entrepreneurship. An entrepreneurship approach can be used to harness the tremendous amount of human resource and institutional capabilities that exist in Kenya for faster economic development. This is possible through inculcating an enterprise culture that prepares the population to take advantage of the abundant business opportunities and provides supportive measures for entrepreneurs irrespective of their levels of development to realize their potential.

The influence of culture on economic activities of different societies has been investigated since the beginning of the 20th century. Weber, (1958) for instance showed the influence of religion (as a component of culture) on the economic performance of the society. Casson, (1991) also suggested that culture is a determinant of economic performance among nations. More specifically Davidson &Wilklund, (1995) proposed that the most obvious source of variations in the levels entrepreneurship across societies is cultural values and cultural context.

Morrison (2000) has argued that entrepreneurship is also influenced by the prevalence of entrepreneurial culture a positive social attitude towards personal enterprise, which

enables and supports entrepreneurial activity. He further posits that economies and regions that have flourished in the late 20th century are those that have a well developed entrepreneurship culture.

Driver *et. al.*, (2001) argues that there is an overall lack of entrepreneurial elements from the education system from South Africa. Factors such as; attitude towards entrepreneurship, entrepreneurial models, negative mindset towards confidence, initiative and, negative perception towards entrepreneurship as a career choice and negative attitude towards failures are all cited to contribute towards the South African entrepreneurial culture. Many of these elements could be impacted upon by education but are absent from the general education system.

Enterprise culture is significant in employment creation in that it involves development of positive attitudes, values, beliefs, behavior and practices towards self employment and business creation. It is expected to increase the pool of potential entrepreneurs and participation of young professionals and skilled graduates from education and training institutions in self employment activities. A good foundation of enterprise culture is also expected to lead to increased rural and urban incomes thereby alleviating poverty and unemployment for the majority of the Kenyan population. In Africa, researchers have been asking why Asian and European minorities seem to be more successful in business than are people of indigenous ethnicity. Moreover, studies in an Africa context reveal that, even among the indigenous ethnic groups, some perform better than others do in business. The Ibo of

Nigeria, the Chagga of Tanzania and the Kikuyu of Kenya have been cited as the most entrepreneurial indigenous communities in Africa (Inguisi, 2001).

2.6 Theoretical Framework

2.6.1 Resource Based Theory

The study is built on the resource based theory that includes the knowledge, training and experience of the entrepreneur and the team of employees and managers. It includes the judgment, insight creativity, vision and intelligence of the individual members of an organization (Bollinger, 1999). It depicts firms as repositories of knowledge and competencies. According to this view, the organizational advantage of firms over markets arises from their superior capability in creating and transferring knowledge. The accumulation of knowledge through learning constitutes a driving force in development and growth of firms, because acquisition of knowledge enhances the firms' ability to sustain a competitive position vis-à-vis its competitors. This added to the fact that the ability to learn faster than competitors maybe the only sustainable competitive advantage (Njuguna, 2009). Through organizational learning, a firm can develop unique human capital and organizational capital that are hard to imitate, and that evolve continuously with the firm (Armstrong,2010). Armstrong argues that employees' skills knowledge and abilities (human capital) are intertwined with organizational culture to form unique resources that other firms cannot acquire and apply.

Schultz (1979) argued that entrepreneurial ability, like other services available for hire is a resource with a market price and quantity. He also conceived entrepreneurial ability as a form of human capital which can be increased through education, training experience health care and so. While education and other human capital investments also lead to improvements in technical and allocative efficiency. Schulz argues that efficiency improvement cannot account for all of the effects of education on economic performance, particularly in agricultural communities during periods of modernization. Increased abilities to adjust to change, for instance by adopting new technology and organizational practices, explain at least part of returns to education. Moreover, an economy's aggregate stock of entrepreneurial ability can also be increased by the immigration of people with particular entrepreneurial experiences and skills in response to increased opportunities for entrepreneurial gain (Peter & Michael, 2005). According to Schultz (1999), the degree to which entrepreneurship is manifested in a society is itself determined by supply and demand. The demand for entrepreneurial services is given by the expected gains from adjusting one's resources in the face of the disequilibrium, itself a function of some characteristics of that disequilibrium. The supply of entrepreneurial capacities is given by agent's ability to perceive and exploit opportunities and like any economic good, entrepreneurship is valuable and scarce (Peter & Michael, 2005).

The weakness of the Schultz theory is that it portrays entrepreneurship as a relatively passive activity, a secondary response to exogenous changes in the economic environment without explaining the drivers of these changes.

The added value that people can contribute to an organization is emphasized by human capital theory. It regards people as assets and stresses that investment by organizations in people will generate worthwhile returns. Human capital theory is associated with the resource-based view of the firm which proposes that sustainable competitive advantage is attained when the firm has a human resource pool that cannot be imitated or substituted by its rivals. Boxall (1996) refers to this situation as one that confers human capital advantage. For the employer, investments in training and developing people is a means of attracting and retaining human capital as well as getting better returns from those investments. These returns are expected to be improvements in performance, productivity and capacity to innovate that should result from enlarging the skill base and increasing the level of knowledge and competence. Schuller (2000) argues that the general message is persuasive; skills, knowledge and competences are key factors in determining whether organizations and nations will prosper.

2.6.2 Sociological and Cultural Theory

Sociologist and social scientist have underscored the influence of society and culture in the formation of entrepreneurs. They emphasized the role the cultural values and social networks in promoting or discouraging entrepreneurial activities. Various dimensions of social networks may be salient, including relatives, friends or community (Djankov *et. al*, 2005). Research by Hofstede 1980 identified five dimensions of culture that can be expected to impact on entrepreneurial behaviors within a country Those dimensions include, Power distance uncertainty avoidance,

Masculinity vs femininity and Confucian dynamism and individualism vs collectivism.

The power distance dimension is the sense of inequality between people within a society. Inequality can be manifested in wealth, power, education and basic physical and mental individual characteristics. The power distance dimension is a characteristic of social systems and organizational styles. Entrepreneurs might be expected to prefer larger power distance situations than non- entrepreneurs. People who are individualistic are more concerned with about themselves and their nuclear families , while collectivistic people feel that they belong to groups such as , families or clan or organizations.

Uncertainty avoidance refers to the extent to which people feel threatened by the unknown and ambiguous situations. Uncertainty avoidance can be characterized with three indicators: rule orientation, employment stability and stress, leading to the need for security and a dependence on experts. Uncertainty avoidance is negatively correlated to the need for achievement, and this suggests that entrepreneurs would exhibit low levels of uncertainty avoidance. Hofstede (1991) noted that rituals and rules are used by people to avoid uncertainty, which would also suggest that entrepreneurs would exhibit low levels of uncertainty avoidance.

Masculinity is understood in traditional terms of roles for the two sexes. Masculine cultures emphasizes mainly on material success, competition, challenges and performance. Feminine cultures put more emphasize on the well being of people , consensus , quality of life , and environmental protection. Individuals characterized with masculinity culture tend to be entrepreneurial, while those with feminine culture

tend to be less entrepreneurial. Confucian dynamism a dimension of uncertainty avoidance is the long or short term orientation in planning. This is the extent to which a society exhibits a pragmatic future orientation perspective rather than a conventional short term view. In this case low Confucian dynamism is characterized by risk avoidance, respect for traditions and stability

2.7 Thematic Model

Models are used as frameworks or paradigms of the thinking within the subject matter. They serve as a guideline for the compilation of entrepreneurship education programmes. Understanding the elements and their influences on the development of entrepreneurial potential is crucial to the internalization of entrepreneurship theory and the development and implementation of policy initiative to enhance entrepreneurship education. Paradigm is the underlying philosophy that dictates the methodology used in the training of Entrepreneurs because it guides the relevant thinking content, pedagogy and ultimately the outcomes (Mayfield & Weaver, 1997).

2.7.1 Entrepreneurial Performance Education Model (E/P Model)

This model was developed by Vuuren and Nieman (1999) and it is concerned with the elements that drive entrepreneurial performance and was developed to guide syllabi and curriculum development. The relevance of this model is that being a mathematical model and as the constructs are multiplicative, there is an indication that the absence of any one of the elements such as motivation, entrepreneurial skills or business skills will lead to zero or extremely low levels of entrepreneurial

performance as measured by the involvement and execution of start up activities by the student. Vuuren and Nieman (1999) observed that those students who had completed their Bachelor of commerce degrees and choose to go into employment rather than work for themselves in a small business, lacked motivation to do so and those with motivation started their own business. The direct linear model suggests that entrepreneurial performance is a function of motivation, Entrepreneurial and business skills and can be depicted as:-

$$E/P = f(aM(b E/S \times c B/S)] \quad (\text{equation 1})$$

Where: E/P is the entrepreneurial performance:

M is the motivation; E/S is the Entrepreneurial skills, B/S is the business skills, and a to c are constants. Based on the E/P model, educational Programmes are planned to cover the three key constructs of the model within the context of any planned programme, different quantities and qualities of skills and knowledge are concluded.

This model does not incorporate the facilitator who reinforces thinking and uses different approaches to instill business skills and motivation but the reason being that it focuses on the performance of the entrepreneur rather than the success of the training course.

2.7.2 Entrepreneurial Education Model (E/E model)

This model was developed by pretorius (2001) and it considers not only the content of Entrepreneurial education programmes but also the context wherein such programmes are operated by the facilitators and the approaches that they use. The model identifies five constructs relevant for entrepreneurial education to increase start-ups and also

indicates the relevance of the programme context. The relevance of the model is that the facilitator is the key construct and based on his skills, knowledge, experience and methodology application should govern the construct but also govern the variable mix and changes it according to varying demands during the programme. The model has an associated measurement instrument to evaluate existing entrepreneurial programmes. The E/E model can be depicted as follows:-

$$E/E = f [aF(bA \times cB/P) \times (dE/S \times eB/S)] \quad (\text{equation 2})$$

Where: E/E is the entrepreneurial education for start-ups; F is the facilitator skills, knowledge and motivation; A is the approaches used by facilitator(s); B/P is the business plan utilization; E/S is the entrepreneurial success themes and knowledge; B/S is the business skills and knowledge; and a to e are constants. The strength of this model is that it considers both the involvement of the learner in the learning process and the variety of learning approaches used the model includes the facilitator who motivates the learner using own experience and the way the facilitator uses different approaches.

Weaknesses of the two models

Concerning the core constructs of each model, its clear that motivation is much stronger in the entrepreneurial performance model while the facilitators and approaches (pedagogy) constructs are much stronger in the entrepreneurial education model and therefore identifying the weaknesses for both models. compared to the importance that Vuuren and Nieman (1999) attach to motivation construct in their E/P model, The E/E model of Pretorius (2001) is marked weak for this construct despite being implied within entrepreneurial skills construct, reasoning that performance is

dependent on the individuals motivation constructs to the model, will therefore improve it significantly.

2.7.3 Integration of the Two Models

Through the integration of the Entrepreneurial performance model and the entrepreneurial education model, the following model is derived.

$$E \text{ for } E/P = f(aF \times bM (c E/S \times dB/S) \times (eA + fB/P) \quad \text{(equation 3)}$$

Education for E/P therefore is a linear function of the facilitator's ability and skills (aF) to enhance motivation (bM), entrepreneurial skills (cE/S) and business skills (dLB/S) through the creative use of different approaches (values of e L) and specifically the business plan (iB/P). The constants will have a value ranging between zero and one. For example, a facilitator could have very low skills and abilities that he would apply but it is above absolute zero. The same would be true for the constants of the other constructs that have to do with the learner mainly. The model does not have a base level. The strength of the model is that it caters for interaction and individual independent factors. The model that was adopted for the study was the integration of the entrepreneurial performance model by Pretorious (2005).

2.8 Conceptual Framework

The study is concerned with the determinants influencing the performance of entrepreneurship education in public universities in Kenya. The conceptual framework of this study is based on the dependent variable namely the performance of entrepreneurship and four independent variables namely; pedagogical approaches

to entrepreneurship, curriculum relevance, delivery methods and effects of teaching entrepreneurship education on target beneficiaries.

The dependent and independent variables are illustrated in the figure 1.

Conceptual framework

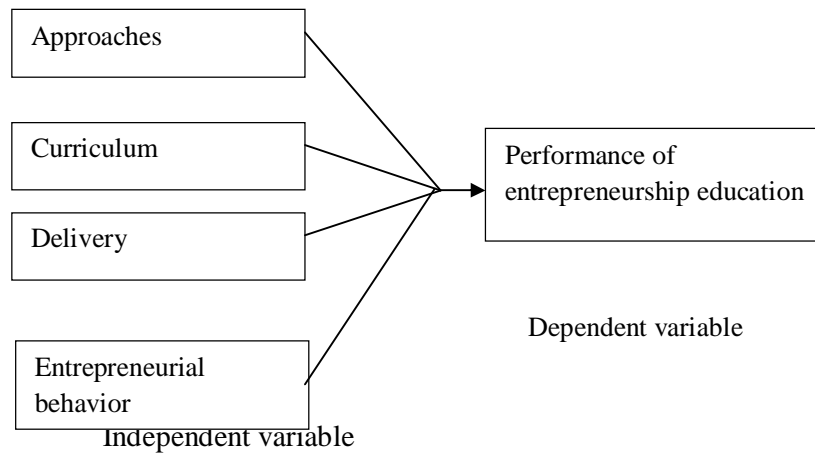


Figure 1: Conceptual framework

Different pedagogical approaches are used by the facilitators in order to develop self confidence and self efficacy of students by enabling them to learn entrepreneurial skills and understanding, the focus being on behaviors. By the use of guest speakers and role models they are able to inspire students towards more positive attitudes to entrepreneurship. The curriculum of entrepreneurship education should involve dealing with uncertainty inherent in business and also motivational so as to motivate many students to venture into business. A well developed curriculum will lead to enhancement of entrepreneurship culture and there will be many start-ups. To be effective in teaching entrepreneurship education, the facilitator needs to employ different learning styles which comprises of concrete experience, reflective observations, abstract conceptualization and active experimentation (Halfman, 2002).

2.8.1 Pedagogical Approaches

According to Sergio *et al.*, (2000), the following were the pedagogical methods used to teach entrepreneurship as follows, reading, lecturers, guest speakers, testimonial videos, tutorial ship in companies, and development of business plans. The least used methods were case development plans. The least used methods were case development and testimonial videos. The approach of teaching entrepreneurship at Cambridge in the United Kingdom has been to develop the self confidence and self efficacy of students by enabling them to learn entrepreneurial skills and understanding, the focus being on behaviors. At the Cambridge the core curriculum focuses on the entrepreneurial processes that are “taught” by entrepreneurs. Its felt that they are best equipped to do the teaching and by providing additional ways of students to interact with entrepreneurs.

The trainer can use various teaching approaches that include the lecture methods, case studies, projects, simulations, guest speakers, testimonials videos, attachments and business plans. The least used method is case development and testimonial videos. The entrepreneurs are also involved in teaching as role models. Its felt that they are the best equipped to do the teaching and by providing additional ways of interacting with students they are able to inspire them towards more positive attitudes to entrepreneurship (Briga, 1996).

Nduge (2003) argues that the forms of teaching are as important as the curriculum content in the development of self efficacy. Entrepreneurship self efficacy can be conceptualized as being enhanced through pedagogical approaches which encourages the students to learn through their own experience.

2.8.2 Relevance of Entrepreneurship Education Curriculum on performance

According to Brown (2000) entrepreneurship should be viewed in terms of the skills that can be taught and characteristics that can be engendered in students in order to help them develop new and innovative plans. In this respect Brown mentions that the curriculum has to focus on the features needed to conceive of and start a new business. Albert *et. al.*, (2004) cites four types of knowledge useful to entrepreneurs: business general knowledge, venture general knowledge, opportunity specific knowledge and venture specific knowledge.

According to Peter and Bruce (2006), an increasing number of entrepreneurship courses focus on the mechanics of running a business enterprise and also on identifying business opportunities for creating new sources of value. Opportunity identification is typically taught through innovative problem solving and creative thinking exercises and techniques rather than traditional classroom activities.

Gartner *et. al.*, (1992) comments that an important part of entrepreneurship education involves dealing with the uncertainty inherent in business entry. This aspect of

uncertainty in new business creation is in essence the foundation of entrepreneurship curriculum development. Educators must expose the degree of uncertainty and focus attention on new product development, new services, new markets and new organizations.

According to Halfman (2002), the content of entrepreneurship education partly motivational and partly focused on formal and practical knowledge and skills, existing credit systems, book-keeping, marketing and business plan is compulsory .The content of curriculum has an effect on the teaching approaches to be adopted by the trainer, it also affects the obstacles encountered, the learning approaches to be adopted and pedagogical approaches to use. A well developed curriculum will lead to enhancement of entrepreneurship culture and there will be many start-ups.

Sexton and Upton (1988), suggests that entrepreneurial programmes be designed in such a way to make potential entrepreneurs conscious about the barriers of entering entrepreneurial activities so that in real life they can be able to devise strategies to overcome them. The educators have to raise student's awareness about entrepreneurship and involve learners to experience frustration associated with entrepreneurial activities.

2.8.3 Effects of Delivery Methods on Performance

The trainer (intervening variable), is assumed to be a well qualified and motivated person who can affect the outcome (dependent variable). The trainer can adopt the teaching approaches that are appropriate to a particular topic, can also minimize the

obstacles inherent in the curriculum; influence the entrepreneurship culture formation by availing the role models. The facilitator should ensure that immediate environment (learning environment) is conducive to learning. This will involve ensuring that the facilities and resources are available and accessible to students (Briga ,1996).

The facilitator must possess the necessary professional knowledge and skills and be able to communicate the message in a language that will be understood by the learner. The trainer should vary the training methods and provide for the trainee's differing learning styles (Halfman, 2002).

Kolb, (1984) developed the experiential learning model which is based on adults learning from their experience.

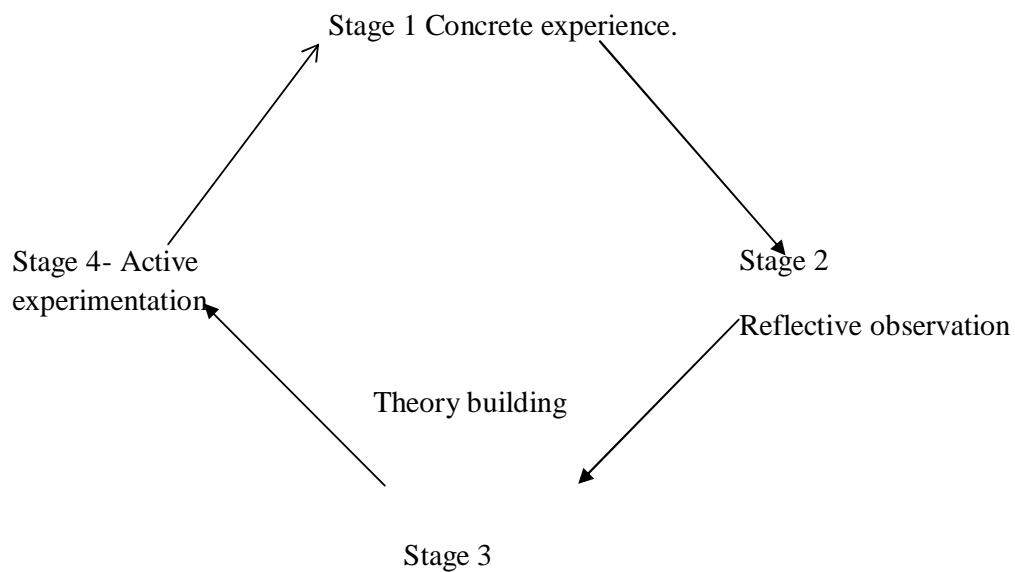


Figure 2: Cycle of learning (Kolb, 1984)

To be effective in teaching entrepreneurship education, the facilitator needs to employ different learning styles which comprises of concrete experience, reflective

observations, abstract conceptualization and active experimentation. For example, a deficiency in concrete experience may lead to an inability to implement the plans (Bramely, 1986).

On the concrete experience, the facilitator needs to use applied lecture, limited discussion, cases, role plays, problem-oriented exams and programmed instructions with emphasis on skills. The facilitator uses traditional teaching approach focuses on developing a particular mastery of the various abstracts. Performance is evaluated by testing the participants' ability to recall various abstracts concepts. The participation's is solely reflective. The facilitator needs to use approaches that require change in knowledge required readings, handouts, programmed instructions with emphasize on concepts and content oriented exam in active experimentation stage it entails use of learning experience such as role playing, management simulations, structured exercises or focus learning feedback (Kolb, 1984). Dana (1987), argued that entrepreneurial learning style preferences are consistent with active Participation and that increased opportunities to participate in a classroom would increase student awareness and enhances the ability to learn from experience. Dana further argues that the emphasis should be on improving entrepreneurial skills development and on the importance of learning the skills to learn as an ongoing process rather than on traditional management course content.

2.8.4 Effects of Entrepreneurship Education performance on Target

Beneficiaries

A study by Halfman (2002), observed that TIVET students who received integrated entrepreneurship education more often start their own business within a few years time than students in general secondary education .However a majority of those who establish on their own prefer an initial period of wage employment in order to gain practical experience from the trade and build professional self-confidence. Also self employment is more often found among TIVET graduates in rural areas than in the cities. The reason being that there are gradually fewer opportunities for wage employment in rural areas, and that the access to land and other natural resources is less difficult than in the cities.

Muturi (2006) examined student's attitude towards entrepreneurship in technical institutes while still in school and concluded that most students pursue entrepreneurship with a view of accruing financial gains from it, the nature of jobs involved and pressure to venture into business by their parents; most students felt that aspects of entrepreneurship curriculum such as courses available, contents of the courses available, and their relevance to the job market as relevant; teaching techniques adopted by the Academic staff as effective in imparting entrepreneurial skills. The factors hindering effective acquisition of entrepreneurship skills were lack of practical exposure, negative attitude towards entrepreneurship and poor delivery methods.

Muchane (1998) carried a study on Masters of Science in entrepreneurship programme after students exiting college. This study however sought to examine the gap existing in the integration of entrepreneurial skills/education and academic and technical curriculum in the teaching setup. It also sought to examine why students are averse to setting up their own businesses even after the entrepreneurial skills were imparted to them during their learning period at the technical institutes: The researcher concluded that most of the students lack the necessary carriage to venture into small business and those who had the necessary capital a few had started their own business.

2.8.5 Measurement of Performance of Entrepreneurship Education

The different pedagogical approaches has to develop the self confidence and self efficacy of students by enabling them to learn entrepreneurial skills, the focus being on behavior. By using the role models they are able to interact with students and inspire them towards a more positive attitude to entrepreneurship. The content of entrepreneurship education should be partly motivational and partly focused on formal and practical knowledge and skills . A well developed curriculum will lead to enhancement of entrepreneurship culture and there will be many start-ups. To be effective in teaching entrepreneurship education, the facilitator needs to employ different learning styles which comprises of concrete experience, reflective observations, abstract conceptualization and active experimentation. For example, a deficiency in concrete experience may lead to an inability to implement the plans. The

Performance of entrepreneurship education was measured by the ability of the students to identify business ideas in their trade areas, being able to develop business plans, positive attitude towards self employment and the number of start –ups.

2.9. Hypotheses Testing

In the study of making the case for entrepreneurship Michael and Ali (2006), used an ANOVA factorial and through a general linear model. One of the objectives of the study involved a two fold scheme, first, demographic factors influenced students choices to enroll in an entrepreneurship based course was explored. Secondly, an analysis was done on whether there was a difference between 2 year and 4 year college students with regard to their levels of interest in enrolling in entrepreneurial based courses. The results indicates only the level 0 a student (2 year or 4 year student) had the most significant effect on the level of desire to enroll in such courses.

Daniel *et. al.*, (2008) in the study of creating entrepreneurship education investigated the hypotheses through analyses of variance and multivariate linear and ordinal regression analyses. Before analyzing the data the variable for entrepreneurial intention was normally distributed. Some of the variable were positively (being entrepreneurship student, personal experience of entrepreneurship, creativity) or negatively (being female, perception of financing risk, marketing risk and administrative difficulties) correlated with the dependent variables. Some of the independent variables were correlated with each other.

Grace (2004), in the study of Job satisfaction survey among employees in small businesses, used correlation analyses to test various groups before the interview and after. The results from correlation analyses indicated that before interview, relationships between job satisfaction and work, supervision, pay and co-workers were all significantly positive ($P < 0.05$) pay and co worker was not highly correlated either. After interview, the relationship between the coworker and pay was modified and become significantly correlated. To test the group differences an analyses of variance (ANOVA) was conducted with grouping as the independent factor.

Karim and Islam (2007), in the study of the adoption of advanced quality practices and its impact on manufactures carried ANOVA statistics to investigate the influence of advanced quality practices on the difficulties companies face. The results indicted other than product development, all the factors have significant F-values (< 0.05). The significant F values rejected the null hypotheses that means are equal and suggested that means vary significantly.

Suree and Linda (2006) utilized three statistic techniques for testing hypotheses; multivariate analysis of variance (MANOVA), one- way analysis of variance (ANOVA) and independent sample t-test. in order to ensure that there was no problem with multi-collinearity among the research variables , Pearson correlation matrix was constructed to assess the strength of the correlations among the independent variables .The presence of high multi-collinearity would make determining the contribution of the effect of each independent variable on the dependent variable difficult as it indicates that the effects of the independent variable are mixed or confounded. None of the squared correlations are close enough to 0.80 to suggest problem with multi-

collinearity among the research variables. MANOVA was used as a preliminary analysis to find out if there were any differences in factors affecting the use of internet and web based marketing between the different groups of hotels in terms of non-early adopter and early adopter hotels. When a significant difference in the identified factors between these two groups was found, One- way ANOVA was used to follow up the analysis of MANOVA. ANOVA was used to find out which of the factors differed significantly across the groups or discriminated .The t-test was used to compare mean scores of two groups of hotels in terms of Non- early adopter hotels and early adopter hotels, in order to confirm and support the results of the one-way ANOVA.

2.10 The Assessment of Entrepreneurship Courses

Alberti *et. al.*, (2004) assert that the main problem related to the assessment of entrepreneurship education may lie in measuring output from the entrepreneurial education process. They further claim that there are no standardized methods for assessing the results of entrepreneurship education programmes towards individuals and towards society. Alberti (2000) argues that some of the reasons for the lack of generally accepted measures are: The variety of target groups, the university /school philosophy that are contrary to entrepreneurship education/training focus, levels of analysis (society level, firm level, and individual level) and time dimension (short term output and long term output) .

Hynes (1996) and Fleming (1999) emphasize that outputs of entrepreneurship education can be assessed on a tangible and intangible basis. Tangible outputs are

viewed under assignments, presentations, reports, drawings, prototypes, products and exhibitions. An intangible effect is views in terms of goals achievements, skills/knowledge, confidence, decision making, problem solving, and communications.

Hyres (1996) points out the following assessment techniques are used at the University of Limerick; examination of set reading/lecturing material; project proposal submission, involving the formation of teams, project presentation and discussion. He suggests that the combination of the above assessment techniques allows testing and evaluation of various learning instruments used.

Copper and Gordon (2004) argue that despite the lack of accepted assessment measures in Entrepreneurship education the traditional methods which are examination based of assessment alone are not very effective in the measurement of individual learning in entrepreneurship. They suggest adopting an innovative approach that would encourage students to explore their experience, reflect on the learning they have achieved, in terms of both knowledge and understanding and the skills they have developed.

Fayalle *et. al.*, (2006) used two multi-item likert-scale closed questionnaires aimed at measuring changes in their attitudes, perceptions and intention. The questionnaire provided measures attitudes towards the behavior, subjective norms, perceived behavior control and intention before and after the entrepreneurship education programme (EEP). In those surveys, each item was scaled from one to seven and the variables were measured as the average score of the corresponding item. The

questionnaires also included items related to some characteristics of the EEP, the demographic and background questions about the audience (previous experience and the presence of a role model among close relatives) and measures of skills acquired.

Gartner (1987) listed eighteen evaluation criteria, ranked in order of importance by expert respondents. The top five criteria, were: The number of courses offered, publications by teachers, impacts to the community, venture creation by students and young graduates and resulting innovations. Two issues should be stressed regarding the results. First the above classification was produced by academics not by venture creation professionals or economic and political decision makers , Second, the results provides with guidance regarding how the selected indicators can and should be measured. Moreover educational institutions offer a wide range of entrepreneurship awareness and education activities. Given that the goal of entrepreneurship education is not necessarily for all participants to create a business in the short term, the simplest and the most obvious indicators are not generally the most appropriate. The evaluation criteria used should be adjusted to the educational level, the goals of the education programme and the target audience all of which need to be clearly identified.

Regarding the measuring methodology issues, measurement biases can rise from both time and contextual effects. First as shown by Block and Stumpf (1992) and summarized in Table 1.

Table 1 : Assessing the entrepreneurship Education programme (EEP)

Timing of measurement	Relevant evaluation criteria
During the EEP	courses, general awareness and /or interest in entrepreneurship intention to act
Number of students enrolled, number of	Intention to act, acquisition of knowledge
Shortly after the EEP	and knowhow, development of entrepreneurial elf - diagnosis abilities
Between zero and thee years after the EEP	Number of venture created Number of buyout
Between three and ten years after the EEP	Sustainability and reputation of the firms level of innovation and capacity for change exhibited by the firms
More than ten years after the	Contribution to society and the economy
EEP	business performance level of satisfaction with career

Source: Based on Block and Stumpt (1992)

2.11 Summary

It is apparent that the literature survey done here shows that there is an increasing interest in the development of educational programmes to encourage and foster entrepreneurship. The great challenge for researchers is how to foster entrepreneurial culture within the education system so that the youth can have positive attitude towards employment. In this respect the content of entrepreneurship courses and the delivery process have been discussed. As far as the course content is concerned, various researchers point out little uniformity. However, for the entrepreneurial success of learners, there is recognition that the contents of entrepreneurship courses should emphasize opportunity recognition knowledge, marshalling of resources to pursue the opportunity and the creation and management of a viable business. It is

suggested that traditional methods of teaching entrepreneurship give way to new methods that balance lecture-based classes with active experimentation. This requires a shift in the role of teachers from instructor to that of the facilitator. The classroom-based examinations are not effective assessment techniques for entrepreneurship courses.

2.12 The Existing Gaps

Most of the studies on the literature review have focused on the students of entrepreneurship after they have been taught entrepreneurship skills and after. Other studies have concluded that the young people leaving colleges do not possess knowledge and skills that could be utilized for production of goods and services that could be marketable therefore the entrepreneurship education is deficient in impacting the right skills to the students. Most studies especially in Kenya have not utilized a model that could be used for teaching and evaluating entrepreneurship education. The researcher therefore carried the study after students have been taught entrepreneurship education in the public universities and also on the target beneficiaries who have started their own businesses.

CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

The chapter describes the methods that were employed in the achievement of research objectives. It covers research design, target population, sample and sampling techniques, data collection methods, pilot study, validity of the instruments, instrument reliability, data collection procedures and data analysis and presentation.

3.2 Research Design

This study adopted descriptive research design that used both qualitative and quantitative research approaches. This design method, presents procedures for collecting, analyzing and linking both quantitative and qualitative data in a single study (Creswell, 2005). The combination of both forms of data provides a better understanding of the variables under study. The researcher used descriptive approach which was appropriate for this study because it involved fact finding and enquiries to explore the determinants influencing the performance of entrepreneurship education in public universities. It was more than just a collection of data because the researcher was involved in measurement, classification, analysis, comparison and interpretation of data. Kombo and Tromp, (2007) further observed that descriptive approach is designed to obtain information concerning the current phenomenon and whatever possible to draw valid general conclusions from facts discussed. For the purpose of this study, the researcher used a questionnaire and structured interview schedule which was administered to student, entrepreneurs and lecturers in which the opinions

or actual information from the respondents was sought. In this study the independent variables identified were the Pedagogical approaches, relevance of entrepreneurship education curriculum, effects of delivery of entrepreneurship education and entrepreneurial behavior. The dependent variable was performance.

3.3 Target Population

According to Creswell (2005), a target population is a group of individuals or a set of organizations with some common identity to study. The target population of the study comprised forty lecturers, 800 current students and 475 former students of JKUAT, Kenyatta University and University of Nairobi who had done Master of entrepreneurship or Masters degree with entrepreneurship option. The lecturers who are teaching entrepreneurs skills at JKUAT both part time and full time are 20, 10 from Kenyatta University and 10 from University of Nairobi. The students in the faculty of science of JKUAT were 1,300, School of business in Kenyatta University 4,000 and University of Nairobi School of business 2,100. Those who have graduated with Masters in entrepreneurship or entrepreneurship option up to 2004 were JKUAT 325, Kenyatta University 200 and University of Nairobi 2,000 students.

The study was limited to the students of Jomo Kenyatta University of Agriculture and Technology, Kenyatta University and University of Nairobi. The reason for concentrating the study in those universities was because they have been teaching entrepreneurship skills at undergraduate, Masters degree and at PhD in entrepreneurship. Many students have graduated from those universities who are playing major roles in the country as lecturers, consultants, entrepreneurs, curriculum developers, researchers and as administrators. The three public universities have been

admitting students through joint Admission Board and module two students. In 2009/2010 the total enrollment at JKUAT were 9,716, University of Nairobi 42,360, Kenyatta University 20,299 GoK (2010). The universities selected were also easy to reach and the researcher has been a part- time lecturer at Kenyatta University, University of Nairobi and JKUAT and therefore they were easy to access.

3.4 Sample and Sampling Techniques

This section shows the sampling techniques used by the researcher in determining the size of the sample on which the study was carried out.

3.4.1 Sampling Techniques

For the purpose of this study, the subjects selected were students in fourth year and first year who have been taught entrepreneurship skills and former students who had done Masters in entrepreneurship or Masters with entrepreneurship option and have started their own businesses. The sampling frame used in the selection of the sample was obtained from the faculty of science of JKUAT, School of business of Kenyatta University and University of Nairobi School of Business. The sampling frame for the former students who had started their own businesses was obtained from the register of academic of the three universities.

The sampling method that was adopted was both probability and non-probability. Non-probability method was used to select the universities of study using the convenient method and also lecturers teaching entrepreneurship skills in the three universities. Convenient was adopted because the lecturers have been teaching

entrepreneurship skills at different levels at diploma, degree, masters and PhD. Those students who had completed the studies and have started their own businesses were selected using snowball sampling technique whereby those identified were used to identify others who had started their own businesses. A total number of one hundred former students were selected using this method.

The actual method that was used to select the students was systematic random sampling whereby all the fourth year students doing Bachelor of Commerce in University of Nairobi and Bachelor of Science in JKUAT and Bachelor of Commerce in Kenyatta University was listed down in the random order. The target population was eight hundred and the desired sample size was two hundred and eighty, therefore the formula that was used to get the sampling interval is; target population divided by Sample size. The starting point was to select from the table of random numbers and the process to continue until the required sample size was achieved. Using simple random sampling techniques, the table of random numbers was used to select the desired number of students.

3.4.2 Sample size

Table 2 shows how students were selected from University of Nairobi, Kenyatta university and JKUAT.

Table 2: Sample size for Undergraduate

Universities	Population	Target popn	Sample size
Nairobi	2,100	400	100
JKUAT	1200	200	80
Kenyatta	1300	200	100
Total	4500	800	280

Table 2 shows that in the faculty of science of JKUAT, the number of students in fourth year was two hundred who have been taught entrepreneurship skills and one hundred of them were selected for the study. In the Business School of Kenyatta University the students doing Bachelor of commerce were one thousand three hundred and the ones in first year who have been taught entrepreneurship skills were two hundred, the number selected was one hundred. In University of Nairobi School of Business the students who have been taught entrepreneurship skills were two thousand and the desired number selected was one hundred.

Table 3: Sample size for Masters degree students

Universities	Population	Target popn	Sample size
Nairobi	2000	150	40
JKUAT	325	325	40
Kenyatta	200	200	20
Total	2,725	475	100

The Table 3 shows the students who have graduated with Masters in entrepreneurship or entrepreneurship option up to 2004 were JKUAT 325, Kenyatta University 200 and University of Nairobi 150 students. The students sampled from University of Nairobi were forty, JKUAT, forty and Kenyatta University twenty students.

Table 4: Sample Size Lecturers

Universities	Target Population	Sample size
Nairobi	15	10
JKUAT	25	15
Kenyatta	16	15
Total	61	40

From the Table 4, the number of lecturers teaching in the school of Business University of Nairobi both part time and full time was fifteen lecturers and the sample selected for the study was ten lecturers. From the School of Human Resource Development of JKUAT the number of lecturers both part time and full time were twenty five lecturers and the number selected for the study was fifteen lecturers. The number of lecturers for entrepreneurship in the school of business of Kenyatta university both part time and fulltime were sixteen lecturers and the sample size selected was sixteen lecturers.

3.5 Data Collection Methods

This study employed two types of data collection methods, namely primary data and secondary data. The two methods are discussed below.

3.5.1 Primary Data

This study largely relied on primary data collected from students and academic staff and former students of JKUAT, Kenyatta University and University of Nairobi. The study used two research instruments to collect primary data; the questionnaire and interview schedule.

a) Questionnaires

One sets of questionnaires was administered to the respondents (see Appendix i) after they have been taught entrepreneurship skills. It contained questions seeking to establish how entrepreneurship education had helped students to develop various aspects of business, rate how entrepreneurship had impacted on them, rate the relevance of the entrepreneurship curriculum, the pedagogical approaches used in teaching entrepreneurship and the effectiveness of delivery of entrepreneurship skills.

b) Interview Schedule

The interview schedule was conducted by the researcher and it was used to compliment the questionnaires and to obtain in depth information on the opinions of the respondents. The interview schedule was used to gather information from lecturers and entrepreneurs. The information sought from lecturers included the methods of instruction that was used in teaching, the most appropriate method used, and the obstacles that hinder the teaching of entrepreneurship education. Entrepreneurs

interview schedule was to solicit information on how entrepreneurship had influenced them develop various aspects of business, how entrepreneurship skills had influenced them to start their own businesses and the relevance of the entrepreneurship curriculum in impacting relevant skills.

3.5.2 Secondary Data

The relevant literature on matters relating to enrollment was obtained from the dean of faculty of science of JKUAT, dean School of Business University of Nairobi and dean School of Business Kenyatta University. The general information on entrepreneurship was obtained from the K-rep Library, School of Human Resource Development at JKUAT, Libraries of JKUAT, Kenyatta University and University of Nairobi.

3.6 Pilot Testing

The research instrument was pilot tested. The aim of piloting was to help identify misunderstandings, ambiguities and useless or inadequate items in the instruments. Preliminary analysis using the pilot test data was undertaken to ensure that data collected enabled the researcher to investigate questions to be answered. Pilot testing questionnaire was administered on ten students in the Faculty of Science of JKUAT from the target population but outside the sample of study. They were obtained through a simple random sampling. Also the interview schedule was pilot tested on ten lecturers from three universities and ten entrepreneurs from the target population but also outside the sample of study. They were selected using the convenient sampling technique.

3.6.1 Validity of Research Instruments

Saunders *et, al.*, (2003) validity has to do with how accurately the data obtained in the study represents the variables of the study. If such data is a true reflection of the variables, then inferences based on such data will be accurate and meaningful.

The problem that was encountered concerns the use of several research assistants in collecting data for the same study. The research assistants were not consistent among themselves in observing, measuring, scoring or assessing characteristics under study. To avoid that problem the researcher standardized data collection procedure by holding a training session for research assistants. The assistant's researchers were students who were doing Masters of Science (MSc) in Entrepreneurship at JKUAT.

3.6.2 Reliability of Research Instrument

Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials. Kothari (2009) reliability refers to consistency of measurement; the more reliable an instrument is, the more consistent the measure. Reliability is influenced by random error. As random error increases, reliability decreases. Random error is the deviation from a true measurement due to factors that have not effectively been addressed by the researcher (Mugenda & Mugenda , 2003). The researcher attempted to minimize random error and hence increase the reliability of the data collected by administering the same instrument twice to the same group of subjects.

3.6.3 Reliability Test

Table 5: Measurement of Reliability (Cronbach's Alpha)

Measurement Scale	Number of Items	Cronbach's Alpha (α)
Performance	10	0.731
Teaching Approaches	10	0.752
Relevance of Curriculum	10	0.711
Effects of Delivery	10	0.730
Target Beneficiaries	10	0.714

Reliability is a fundamental issue in any measurement scale. Scale reliability is considered as the proportion of variance attributed to the true score of the latent construct (Gable, & Wolf, 1993). It is usually measured by internal consistency reliability that indicates the homogeneity of items comprising a measurement scale. Internal consistency gives the extent at which items in a model are inter-correlated. Thus, high inter-item correlations explain that the items of a scale have a strong relationship to the latent construct and are possibly measuring the same thing. Usually, the internal consistency of a measurement scale is assessed by using Cronbach's coefficient alpha. It is generally recommended that if a measurement scale having a Cronbach's coefficient above 0.50 is acceptable as an internally consistent scale so that further analysis can be possible. Considering the small number of items used to measure each of the 10 values and their necessary heterogeneity, even reliabilities of 0.5 are reasonable. Since alpha value is slightly above 0.5, the study instruments yielded fairly reliable data for this research, thus measuring performance against Pedagogical approaches, relevance of entrepreneurship education curriculum,

delivery of entrepreneurship education and effects on target beneficiaries was reliable and valid.

3.7 Data Collection Procedures

An authority letter was sought from the relevant offices in the Universities. An introduction letter was sought from the dean of the School of Human Resource Development of JKUAT. The researcher then personally visited the deans' faculty of science of JKUAT, School of Business Kenyatta University and dean University of Nairobi, School of Business to seek permission for the intended visit. During the visit, the researcher made arrangements for issuing of the questionnaires for administration to the respondents. After issuing the questionnaires, respondents were given at least one week to respond to the items in the questionnaires, after which the researcher then collected. Interview schedule was self administered by the researcher assistants at the same time, the researcher examined the data published and unpublished, official documents that existed in the universities library to supplement information collected through questionnaires and interview schedules.

3.8 Data Analysis and Presentation

There were two kinds of data, namely data obtained from questionnaire and interview schedule. The responses were subjected to qualitative and quantitative analysis techniques. The qualitative data required the respondents to give opinions and suggestions. Quantitative data obtained was tabulated, frequencies and interpretation made. The measures of dispersion and measures of central tendency such as mean,

standard deviation and percentages obtained, other methods to be used include designing regression equation for estimating response variable of a function of set of independent variables. Performing correlation analysis and testing different hypothesis relating to various issues of research.

Analysis of variance (ANOVA) was used in the study which is a statistical method to examine whether there are differences in a dependent variable by a set of interval independent variables. The Analysis of Variance (ANOVA) yields main effects and interaction effects. Main effects reveal whether the dependent variable differs by different levels of the independent variable; interactive effects reveal whether the dependent variable differs by the combined effect of two or more independent variables. The analysis of variables and F- statistics, which signifies the probability that the means of the dependent variable statistically differ from each other. The assumptions of ANOVA are that scores are normally distributed, the scores are independent and the variances are equal in each group.

The study adopted an integration model which is a combination of entrepreneurial performance model and the entrepreneurial education model. Therefore the following model was derived:

$$E \text{ for } E/P = f(aF \times bM (c E/S \times dB/S) \times (eA + fB/P))$$

Education for E/P therefore is a linear function of the facilitator's ability and skills (aF) to enhance motivation (bM), entrepreneurial skills (cE/S) and business skills (dLB/S) through the creative use of different approaches and specifically the business plan (iB/P).

The study used random intercept and model (multiple Regressions) because the data was continuous. The data took the following form:-

$$E = \beta_0 + f(aF + bA + cC + dD + eE)$$

Where E is the dependent variable (performance of Entrepreneurship education)

β_0 = is the intercept base level (constant) it measures the unexplained variability (or the error of the model).

F = the facilitators ability, skills and experience

A = Approaches

C = Content

D = Delivery techniques

E=Entrepreneurial Behavior

f =the effect of the interaction of F, A, C, D &E

a,b,c,d,e , are coefficient /parameters of F,A,C,D&E respectively.

CHAPTER FOUR

4.0 RESEACH FINDINGS AND DISCUSSION

4.1 Introduction

The main focus of this chapter was the research findings and discussion of the results of the research. The discussion was tied to the overall objectives of the study which was to explore determinants influencing the performance of entrepreneurship education in public universities in Kenya, with a view to improve the teaching and delivery of teaching entrepreneurship skills so as to instil the entrepreneurship culture in order to enhance job creation and minimize poverty. An attempt was made to address each of the four objectives drawn from this broad objectives, namely, to; i) Assess the effect of pedagogical approaches to entrepreneurship education used in public universities, ii) Relevance of the entrepreneurship education curriculum in public universities, iii) Assess the effects of delivery of entrepreneurship in public universities, iv) Effects of entrepreneurship education on the target beneficiaries.

The data used in this study were both qualitative and quantitative and were obtained through administration of questionnaires and interview schedule to lecturers, entrepreneurs and students of three public universities namely; JKUAT, Kenyatta University and University of Nairobi. The lecturers are concerned with teaching entrepreneurship skills and they could give vital information on the subject. The entrepreneurs are the former students who had done Masters in entrepreneurship and are useful in providing vital information on how the subject has impacted on them.

The data was analyzed quantitatively using the Statistical Package for Social Sciences (SPSS). The analysis was done as per questionnaires that were used to collect data. Data was categorized in terms of factors that influence the performance of entrepreneurship education in public universities in Kenya. Personal information was generated to establish various individual characteristics since this has a bearing on the nature of responses given and comprehension of research questions. The study used Likert scale in collecting and analysing the data whereby a scale of 5 points were used in computing the means and standard deviations. These were then presented in tables with explanations being given in prose.

4.2 The Response Rate

The research was conducted on a sample of 420 respondents drawn from the target population of 1336 students, lectures and entrepreneurs in Public universities namely: JKUAT, Kenyatta and Nairobi. However, only 317 questionnaires administered were received from the sample size of 420. This represent a response rate of 75%, which is an adequate response rate for statistical reporting. Arora & Arora , (2003) contend that a questionnaire that produces above 75 % response rate has done extremely well. This response rate was made possible after the researcher personally administered the questionnaires and made further visits to remind the respondents to fill-in the questionnaires.

Descriptive study

4.3 Demographic Information

This section provides the demographic information of the respondents in three categories; the students, lectures and entrepreneurs. The researcher found it important

to establish characteristics of the respondents under which the researcher would make inferences from the response. This includes the age, gender, work experience and the rank of the respondents.

4.3.1 Students Respondents

Table 6: Cross Tabulation of Students

Students Year of study	Gender		Employment Experience	
	Male	Female	Yes	No
First	40	30	10	60
fourth	86	54	13	127
Total	126	84	23	187

The respondents were asked to show their gender, employment experience and year of Study, this was expected to guide the researcher on the conclusions regarding the congruence of responses to the gender characteristics. Table 6 shows that a majority of the respondents were males at 126, who represent 60 per cent while females were 84 representing 40 percent of the students. Those student respondents were specializing in accounting, actuarial science, business management, commerce, entrepreneurship, finance, engineering, human resource management, information systems, insurance, investment, marketing, operation management, procurement and supply chain management, risk management, statistics and actuarial science. The reason why there were more males than females may be because female students shy away from science courses and commerce opting to take other disciplines. The students who were in first year were 70 representing 33 percent and the ones in fourth year were 140 representing 67 percent, this is because entrepreneurship studies in

Kenyatta university is taught in first year. Those students who were interviewed, 23 had employment history whereas 187 had not, representing eleven percent without employment history. Those students who had employment history had worked in their parents businesses and others had started their own businesses before joining the university.

4.3.2 Lecturers Response

Table 7: Cross tabulation of Lecturers

		High Level of education		Age bracket			Small business enterprise	
		Phd	Masters	31-40	41-50	Above 50	Yes	No
Gender	Male	2	13	2	7	3	11	4
	Female	1	16	3	13	4	12	5
Total		3	29	5	20	7	23	9

For the purpose of better understanding the determinants influencing the performance of entrepreneurship education in public universities in Kenya, the respondents were asked to show their gender, age bracket and whether they have small business enterprise. Table 7 shows that male lectures were fifteen and female were seventeen lectures. Most of the lectures have started their own businesses, this represent 79 percent have small business enterprise and 21percent do not have a business. 40 percent had started their own businesses before they did masters and 60 percent after their master's degree. Most of the lectures were within the age bracket of 41-50 representing 63 percent, followed by 50 and above with 32 percent and between 31-40 16 percent. Out of the 32 respondents three have attained PhD and the rest of the lecturers have registered for their PhD in JKUAT, Nairobi, Kenyatta and Kenya

Methodist which represent 62 percent, 6.2 percent, 25 percent and seven percent respectfully. The lecturer's response indicated that they acquired their masters in JKUAT, Kenyatta Moi, Kenyatta, Nairobi, and Kenya Methodist. The fact that most lecturers have started their own businesses is a good indicator that they can use their own experiences when teaching entrepreneurship. The lecturers who were interviewed only seven representing 9 percent have acquired their PhD this indicates that the number of the university lectures with PhD is very low. JKUAT PhD program seems to be popular with students followed by Kenyatta Methodist and university of Nairobi. The main reason for the popularity of JKUAT program is the perception that it takes a short time and the fact that it has a long history of teaching entrepreneurship.

4.3.3: Entrepreneurs Response

In the current study, the result show that entrepreneurs interviewed started their businesses between the year 1990 and the year 2009. The status of respondents in the enterprise was that they were the founders of their enterprises and they took the roles of owner manager, managing director and director. The distribution of the type of legal organization of the enterprises owned by the entrepreneur's is shown in the table

8

Table 8: Type of Legal Organizations

Type of enterprise	Frequency	Percentage
Sole trader	53	71
Partnership	14	18
Company	8	11
Total	75	100

From the Table 8, the type of business ownership was mostly Sole Proprietorship that represents 71 percent, followed by partnership at 18 percent and private company 11 percent. Very few enterprises were registered as private company. The reasons for running an enterprise as a sole proprietor is the ease in decision making whereby the owner does not need to consult anybody to make decisions. The reason for registering the business as partnership or registered company is that it can attract larger amounts of capital. For the enterprises organized as partnership or registered companies, the number of partners or directors range from two to three. In the current study the entrepreneurs engage in the following activities; buying and selling merchandise, selling of automobile spares, jewellery, buying and selling cereals, consultancy, buying and selling land and building materials. It can be observed that none of the business was in production as all of them were in distribution. Some of the reasons for starting the business include to be independent, to improve the living standard, ability of the skills and competences, perceived opportunities, for self-esteem, to prepare for retirement, to continue with family business, to supplement income and availability of resources. Those who had started their own enterprises had a lot of motivation for starting and a need for achievement. Most respondents were male's fifty one representing 68 percent of the respondents and females were twenty four representing 32 percent. In this study, the age of the entrepreneurs range from 38 - 56 with an average age of entrepreneur's being 46. The entrepreneurs in the age bracket of between 50-59 years were 29, representing 39 percent , between 30-39 were 16 representing 21 percent and 20-29 were five representing seven percent and 40-49 were 24 representing 32 percent. Many entrepreneurs were married representing 79

percent, single 11 percent, divorced seven percent and widow four percent. Those entrepreneurs who had their master's degree attained it in JKUAT, Kenya Methodist, Nairobi, Kenyatta and Moi universities respectively in the years between 1994 and 2010.

Out of 75 entrepreneurs interviewed 40 percent indicated that they had started their own businesses before Master's degree and 60 percent started after masters. This means that the entrepreneurship program increased the chances of engaging in business. Other than the business enterprises the entrepreneurs indicated that they were involved in consultancy work, investing in stock exchange market, real estate and lecturing. It can therefore be concluded that entrepreneurs engages in those activities as a way of diversifying the risks.

4.4: Variable One: The Effects of Pedagogical Approaches to Entrepreneurship Education on Performance in Public Universities

It was necessary that the study establishes the effects of pedagogical approaches to students of entrepreneurship education in Public Universities on their performance as the main objective of this study. The teaching approaches adopted enables the students understand the various concepts taught and relate them with personal experiences. The teaching approaches refers to the methods that lectures use in order to achieve the objectives of the course.

4.4.1: Students Response to Pedagogical Approaches

Students were asked various questions concerning the teaching approaches used by the lecturers in order to know the most effective method to achieve the objectives of the course. They were required to respond to the methods used in teaching, equipment that helped them in the ability to learn, method of assessment used by the lecturers and the method that helped them in understanding entrepreneurship.

Table 9: Methods used in teaching

Parameter	N	Min	Max	Mean	Std Dev
Lecture	205	1	5	4.3721	0.77126
Case study	205	1	5	3.0400	1.21416
Discussion	205	1	5	3.8425	1.03452
Role play	205	1	5	2.9435	1.38107
Guest speakers	205	1	5	2.0410	1.2882
Demonstration	205	1	5	3.3071	1.36575
Experience Stories	205	1	5	4.2481	0.9924

The Table 9 shows students responses that was analyzed through mean and standard deviation for the following indicators as follows; where entrepreneurship education seeks to provide students with the knowledge, skills and motivation to encourage entrepreneurial success. The methods used in teaching entrepreneurship are the use of lecture with the mean of 4.3721, case study with the mean of 3.0400, discussion with

the mean of 3.8425, role play with the mean of 2.9435, guest speakers with the mean of 2.0410, demonstration with the mean of 3.3071, and experience stories with the mean of 4.2481. The method with the highest mean and the standard deviation was lecture followed by case study, discussion, role play, guest speakers, and demonstration and experience stories. Lecture method being the most preferred may be explained by the fact that many lectures prefer it in order to cover more content considering the depth of the syllabus and the time allocated. The least commonly used method used by lecturers is role play and the use of the guest speaker. The study concur with the one carried by Sergio *et. al.*, (2000), that indicated the pedagogical methods mostly used to teach entrepreneurship's was as follows, lecturers, guest speakers, testimonial videos, tutorial ship in companies, and development of business plans. The least used methods were guest speaker and case study the reason being that getting guest speaker is a long process that requires a lot of preparation and at the same time teaching through a case study is time consuming.

Table 10: Equipment Used

Parameter	N	min	max	Mean	Std div
Whiteboard equipment	205	1	5	4.3178	1.05315
Overhead projector equipment	205	1	5	2.3252	1.46822
Power point	205	1	5	2.1639	1.36279
Videos	205	1	5	1.6967	1.19149

Table 10 indicated that the equipment that helped students to learn with the mean had the following; Whiteboard equipment 4.3178, Overhead projector equipment 2.32521, Power point 2.1639, Videos 1.6967. The results show that only Whiteboard

equipment that help in the ability to learn entrepreneurship while overhead projector equipment, Power point and videos didn't help much as their mean was less than 2.5.

Table 11 : Methods of Assessment

Parameter	N	min	max	mean	Std div
Lecturers used written classroom tests	205	1	5	3.9457	1.27052
Lecturers used Group Presentations method	205	1	5	2.881	1.54716
Lecturers used term papers	205	1	5	3.1705	1.51102
Lecturers used project work	205	1	5	2.3937	1.4647
Lecturers used individuals assignment	205	1	5	3.3594	1.5407

Table 11 indicated the methods for assessment of entrepreneurship learning in the level of strength as follows as per the mean; Lecturers used written classroom tests 3.9457, Lecturers used individuals assignment 3.3594, lecturers used term papers 3.1705, lecturers used group presentations method 2.881, lecturers used project work 2.3937. Students also indicated the method that helped them in understanding entrepreneurship according to the scale given as per the mean and standard deviation as; written classroom tests, group presentations, term papers, project work, and individual's assignments.

Table 12: Method help in understanding Entrepreneurship

Parameter	N	min	max	mean	Std div
Written classroom tests	210	1	5	3.8837	1.32658
Group presentations	210	1	5	3.2598	1.728844
Term papers	210	1	5	3.3281	1.45326
Project work	210	1	5	2.4553	1.49454
Individuals assignment	210	1	5	3.536	1.52688

Table 12 shows that Students indicated that the methods for assessment of entrepreneurship learning in the level of strength as follows as per the mean and standard deviation; Lecturers used written classroom tests following by Individuals assignment, term Papers, group presentations and Project work. Student also indicated the method that helped them in understanding entrepreneurship according to the scale given was written classroom tests, group presentations, term papers, Project work, and individual's assignments.

4.4.2 Lecturers Response to Pedagogical Approaches

Lecturers were required to respond to the pedagogical approaches that they use while teaching entrepreneurship. If the lecturers use an effective method it will make the students be able to understand the concepts used and relate them to real world. A lecturer will use different methods depending on the time allocated, the number of students per class, the content to be covered and the level of the students. The table 4.8 shows lecturers response to pedagogical approaches.

Table 13: Lecturers Response to Pedagogical Approaches

Parameter	N	Minimum	Maximum	Mean	Std. Dev
Lecture	32	2.00	5.00	4.1875	.96512
Case study	32	1.00	5.00	3.2500	1.07763
Discussion	32	1.00	5.00	3.7500	1.31982
Role play	32	1.00	5.00	2.2500	1.29515
Guest speakers	32	1.00	5.00	2.0000	1.29515
Demonstration	32	1.00	5.00	2.8667	1.30604
Experience stories	32	1.00	5.00	4.0000	1.04727

Table 13 shows that there were thirty two total numbers of lecturers who responded to pedagogical approaches used in entrepreneurship education in public universities. The methods used in teaching entrepreneurship were the use of lecture method with the mean of 4.1875, case study with the mean of 3.2500, discussion with the mean of 3.7500, role play with the mean of 2.25, guest speakers with the mean of 2.00, demonstration with the mean of 2.8667, and experience stories with the mean of 4.00. According to the lecturers who responded on the teaching approaches that they used, the method that was the most preferred was experience stories, discussion, demonstration, role play and guest speaker. This suggestion by lecturers concurs with similar observations made by the students.

4.4.3 Factors that Hinder Teaching of Entrepreneurship Education

Lecturers were required to rate the factors that hinder the teaching of entrepreneurship education. The table 14 shows their responses.

Table 14: Factors that Hinder Teaching of Entrepreneurship Education

Factors	N	Min	Maxi	Mean	Std Dev
Text books	32	2.00	5.00	3.281	.96512
Time allocated	32	1.00	5.00	3.125	1.2889
Equipment	32	1.00	5.00	2.937	1.2164
Role models	32	1.00	5.00	3.5161	1.2876
Administration support	32	1.00	5.00	2.843	1.4167
Instructional material	32	1.00	5.00	2.937	1.4354
Financial resources	32	1.00	5.00	3.312	1.4687

Table 14 shows the obstacles that lecturers mostly encounter when teaching entrepreneurship include with the unavailability of the role models with a mean of 3.516,

followed by financial resources 3.3125, availability of the textbooks 3.2812, equipment 2.9375 and administrative support 2.8437. The financial resources are required to buy the teaching materials, to facilitate for the guest speakers and for field study. Some of the text books available do not reflect the local scenarios because they reflect cases from other countries.

4.4.4 Entrepreneurs Response to pedagogical Approaches

Entrepreneurs are the former students who had done entrepreneurship up to master's level and they have started their own businesses. They were asked to respond to the methods that lecturers used when teaching them and to rate the methods that enhanced their self-development. The Table 15 shows the entrepreneurs response to the teaching approaches.

Table 15: Entrepreneurs Response to Pedagogical Approaches

Parameter	N	Min	Max	Mean	Std. Dev
Lecture	75	3.00	5.00	4.1786	.90487
Case study	75	1.00	5.00	3.6667	1.14354
Discussion	75	1.00	5.00	3.4643	1.07090
Role Play	75	1.00	5.00	2.1111	1.21950
Guest Speaker	75	1.00	5.00	1.8519	1.09908
Demonstration	75	1.00	5.00	2.3846	1.29852
Written classroom tests	75	1.00	5.00	4.1923	1.02056
Group Presentations method	75	2.00	5.00	3.8000	.86603
Term Papers	75	2.00	5.00	3.7083	.99909
Project work	75	1.00	5.00	3.3750	1.17260
Formal Presentation of Projects	75	1.00	5.00	3.5833	1.13890
Written classroom tests	75	1.00	5.00	2.4815	1.52846
Group Presentations method	75	2.00	5.00	3.7857	1.10075
Project work helped me in self-development	75	2.00	5.00	4.0769	.89098
Formal Presentation of Projects	75	2.00	5.00	4.2593	.90267

Table 15 shows that there were 75 entrepreneurs who responded to the pedagogical approaches that were commonly used by the lecturers. Lecture method had a mean of 4.1786, case study mean of 3.6667, discussion mean of 3.4643, role play mean of 2.111, guest speaker mean of 1.8519, and demonstration mean of 2.3846. The methods of assessment mostly used by lecturers in terms of mean were written classroom tests 4.1923, group presentations 3.8000, term papers 3.3750, and formal presentation of projects 3.5833. The methods of assessment that helped entrepreneurs in self-development with mean were formal presentation of projects 4.2593, project work 4.0709, term papers 3.7857, and written classroom tests 2.4815. The use of the lecture method was mostly preferred by the lecturers followed by the case study, discussion, demonstration and guest speaker. The reason why the case study was mostly used to teach students at masters as compared to the response of students at undergraduate was that lecturers tend to use case studies at the masters level to enable the students understand the concepts as compared to under graduates.

QUANTITATIVE HYPOTHESES RESULT

4.4.5 Hypothesis: Effects of Pedagogical Approaches on Entrepreneurship Education

H₀ There is no effect of pedagogical approaches to entrepreneurship education performance used in public universities.

H₁: There is significant effect of pedagogical approaches to entrepreneurship education performance used in public universities

Table 16: Hypothesis on Effect of pedagogical Approaches

Model Summary

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.733	.537	.535	.60296

a. Predictors: (Constant), pedagogical Approaches

b. Dependent Variable: Performance

Analysis in Table 16 shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the dependent variables) R2 equals 0.733 that is, explained pedagogical approaches 73.3 percent of performance.

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	78.897	1	78.897	217.010	.000 ^a
	Residual	67.986	187	.364		
	Total	146.884	188			

a. Predictors: (Constant), Pedagogical Approaches

b. Dependent Variable: Performance

The lecturers and entrepreneurs response to pedagogical was measured using various indicators in five Likert scale format from which two most important factors /indicators (those with highest factor loadings) were selected through ANOVA analysis approach. The F-Statistics produced (F=1. 217) was significant at 0 per cent level (Sig. F<.000) thus confirming the fitness of the model. The null hypothesis is reject since the P value is less than 0.05, therefore the hypothesis that

state there is significant effect of pedagogical approaches to entrepreneurship education used in public universities is accepted.

Coefficients'

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta		Lower Bound			Upper Bound	
1	(Constant)	1.304	.209			6.230	.000	.891	1.717
	Pedagogical Approaches	.727	.049	.733		14.731	.000	.630	.825

a. Predictors: (Constant), pedagogical Approaches
b. Dependent variable: Performance

The hypothesis was tested by comparing the means of the pedagogical approaches to entrepreneurship education and the means of the key indicators of performance of entrepreneurship education variables by use of ANOVA. One unit change in pedagogical approaches results in 0.294 units increase in performance.

4.5 The Relevance of the Entrepreneurship Education Curriculum in Public Universities on Performance.

This was the second objective of the study that required students to respond to the curriculum taught to them by their lecturers. It was expected that they could give a feedback on how the curriculum has impacted on them in terms of enabling them develop various aspects of entrepreneurship. Two hundred and ten students from JKUAT, Kenyatta and Nairobi responded to the questionnaires. Table 4.12 the students responses.

Table 17: Students Response to Curriculum.

Parameter	N	Min	Max	Mean	Std. Dev
The preference to be an entrepreneur	210	1.00	5.00	4.4651	.84822
The necessary abilities to be an entrepreneur	210	1.00	5.00	4.3953	.94719
Greater recognition of the entrepreneur figure	210	1.00	5.00	4.3178	.88375
Knowledge about the environment	210	1.00	5.00	4.5194	.77157
Salaried work/employee	210	1.00	5.00	3.1550	1.14871
Entrepreneur	210	3.00	5.00	4.7364	.52320
Improved confidence	210	2.00	5.00	4.4109	.68022
Improved attitude	210	2.00	5.00	4.4729	.69684
Motivated	210	1.00	5.00	4.5969	.73441
Improved choices if self-employment	210	1.00	5.00	4.3798	.81196
Content of the course	210	1.00	5.00	3.9845	.90988
Practical skills	210	1.00	5.00	4.2326	.66255
Response to job market	210	1.00	5.00	4.0000	.84779
Wide range of skills	210	2.00	5.00	4.2946	.77463

The results of descriptive statistical analysis for the entrepreneurship education curriculum are presented in Table 17. Respondents were asked to provide answers on each item that was measured by a five point Likert scale ranging from 1 (very low) to 5 (very high). From the table 4.12 the mean and standard deviation were used to test respondent ideas. The Standard deviation is the square root of the variance, it measures the spread of a set of observations. The larger the standard deviation is, the more spread out the observations are while mean is the arithmetic mean across the observations. Therefore from the results of Table 17, there were 210 students who participated in filling the questioners, the indicators of entrepreneurship education curriculum showed that students were motivated by entrepreneurship education curriculum where this had a mean score of 4.5969, The other indicators on entrepreneurship education curriculum displayed was as follows ; the preference to be an entrepreneur 4.4651, the necessary abilities to be an entrepreneur 4.3953, greater

recognition of the entrepreneur figure 4.3178, knowledge about the entrepreneurship environment 4.5194, salaried work/employee 3.1550, entrepreneur 4.7364, improved confidence 4.4109, improved attitude 4.4729, improved choices of self-employment 4.3798, content of the course 3.9845, practical skills 4.2326, response to job market 4.0000, and finally wide range of skills 4.2946.

From Table 17, knowledge about environment had the highest mean followed by preference to be an entrepreneur, improving the abilities to be an entrepreneur, and greater recognition of an entrepreneur figure. The study concur with the study carried by Sexton and Upton (1988) who suggested that entrepreneurial programmes be designed in such a way as to make potential entrepreneurs conscious about the barriers of entering entrepreneurial activities so that in real life they can be able to devise strategies to overcome them. The educators have to raise student's awareness about entrepreneurship and involve learners to experience frustration associated with entrepreneurial activities. Also according to Peter and Bruce, (2006) an increasing number of entrepreneurship courses focus on the mechanics of running a business enterprise and also on identifying business opportunities for creating new sources of value.

The mean of students who may want to became entrepreneur's was (4.7364, and salaried work/employee 3.1550, implying that entrepreneurship had changed their attitude towards self-employment. This also means that entrepreneurship has been able to develop student's self-efficacy that influences their intentions. Self-efficacy has been found to greatly influence entrepreneurial behavior and improving the

perceived possibility of certain courses of action and therefore vital to encourage increased entrepreneurial intentions Krueger *et. al.*, (2000).

The mean of students on how entrepreneurship education has impacted on personal attributes was motivation 4.5969, improved confidence 4.4109, improved attitude 4.4729, and improved choices if self-employment 4.3798. It can be observed that entrepreneurship education had more impact on motivation of the students. This study concurs with the study carried by Ehrlich *et. al.*, (2000) which found out that entrepreneurship had a positive impact in enhancing such variables as the need for achievement, internal locus of control and a likelihood of action at some point in the future.

The mean on the impact of entrepreneurship curriculum on performance was content of the course 3.9845, practical skills 4.2326, response to job market 4.0000, and finally wide range of skills 4.2946, The students indicated that the entrepreneurship curriculum had more impact in providing them with practical skills and wider skills on how to identify business opportunities, operate a business and manage an enterprise. Once those skills are impacted, a trainee is able to start and manage a business. According to Halfman (2002), the content of entrepreneurship education partly motivational and partly focused on formal and practical knowledge and skills, existing credit systems, book-keeping, marketing and business plan is compulsory.

4.5.1: Correlation of Entrepreneurship Education Curriculum on Performance

The correlation coefficient can range from -1 to +1, with -1 indicating a perfect negative correlation, +1 indicating a perfect positive correlation, and 0 indicating no correlation at all. The Correlation matrix is used to determine the extent to which changes in the value of an attribute is associated with changes in another attribute. When the values are greater than 0.5 then the variables are correlated and when values are less than -0.5 then the values for are not correlated.

Table 18: Correlation of Entrepreneurship Education Curriculum

		JKUAT	KU	Nairobi
JKUAT	Pearson Correlation	1	.588**	.621**
	Sig. (2-tailed)		.000	.000
	N	205	205	205
Kenyatta	Pearson Correlation	.588**	1	.526**
	Sig. (2-tailed)	.000		.000
	N	205	205	205
Nairobi	Pearson Correlation	.621**	.526**	1
	Sig. (2-tailed)	.000	.000	
	N	205	205	205

** . Correlation is significant at the 0.01 level (2-tailed).

The Table 18 shows that there is high positive correlation between JKUAT students and University of Nairobi students at 0.621, there is high positive correlation between Kenyatta University students and University of Nairobi students at 0.526. Finally there is a positive correlation between JKUAT students on entrepreneurship education curriculum and Kenyatta University students on entrepreneurship education curriculum at 0.588.

4.5.2: Hypothesis: Relevance of Entrepreneurship Education Curriculum

H₀: There is no relevance of the entrepreneurship education curriculum in public universities.

H₁: There is significant relevance of the entrepreneurship education curriculum in public universities.

Table 19: Hypothesis on Relevance of Curriculum

Model Summary

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.678	.334	.330	.72348

a. Predictors: (Constant), Relevance of Entrepreneurship Education Curriculum

b. Dependent Variable: Performance

The summary of the basic logic of ANOVA is the discussion of the purpose and analysis of the variance. The purpose of the analysis of the variance is to test differences in means (for groups or variables) for statistical significance. The accomplishment is through analyzing the variance, which is by partitioning the total variance into the component that is due to true random error and the components that are due to differences between means. The ANOVA analysis is intended to investigate whether the variation in the independent variables explain the observed variance in the outcome, in this study the outcome level of performance.

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	49.004	1	49.004	93.621	.001 ^a
	Residual	97.880	128	.523		
	Total	146.884	189			

a. Predictors: (Constant), Relevance of Entrepreneurship Education Curriculum

b. Dependent Variable: Performance

Coefficients

Model		Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B		Beta			Lower Bound	Upper Bound
1	(Constant)	1.309	.316		4.148	.000	.686	1.931
	Relevance of Entrepreneurship Education Curriculum	.709	.073	.578	9.676	.000	.564	.853

a. Predictors: (Constant), Relevance of Entrepreneurship Education Curriculum

b. Dependent Variable: Performance

One unit change in relevance or entrepreneurship education curriculum results in 0.230 units increase in performance.

4.6 Effects of Delivery of Entrepreneurship Education on Performance

It was necessary that the study establishes the effectiveness of delivery of entrepreneurship education on the performance in public universities. The effects of delivery of entrepreneurship education is determined by the trainer (intervening variable), who is assumed to be a well qualified and motivated person who can affect the outcome (performance). The performance is important because it will affect the student's intentions to start their own businesses.

4.6.1 Students Response on the Effects of Delivery of Entrepreneurship

Education

The students who responded to the questionnaires that was administered to them was in public universities was 210. The Table 4.15 shows the responses of students on effects of delivery of entrepreneurship education.

Table 20: Students Response

Parameter	N	Min	Max	Mean	Std. Dev
Objectives clear	210	1.00	5.00	4.1395	.89917
Content coverage	210	1.00	5.00	4.2344	.80827
Teaching Methods	210	1.00	5.00	4.1094	.87155
Motivation	210	1.00	5.00	4.4419	.74903
Impacting Practical Skills	210	1.00	5.00	4.0620	.99806

Table 20 indicates students views on effects of delivery of entrepreneurship education .The mean score indicates favorable since the least score is 4.0620 for impacting practical skills. The standard deviation also indicated that the respondent spread of ideas was minimum therefore the highest standard deviation is 0.99806 for impacting practical skills. The effect on the delivery of entrepreneurship education was determined by the trainer who is assumed to be a well-qualified and motivated person who can affect the outcome (dependent variable). The trainer can adopt the pedagogical approaches that are appropriate to a particular topic, can also minimize the obstacles inherent in the curriculum; influence the entrepreneurship culture formation by availing the role models. The trainer should ensure that immediate

environment (learning environment) is conducive to learning. This will involve ensuring that the facilities and resources are available and accessible to students. The trainer must possess the necessary professional knowledge and skills and be able to communicate the message in a language that will be understood by the learners. The trainer should vary the training methods and provide for the trainee's differing learning styles (Halfman, 2002).

4.6.2 Lecturers Response on the Effects of Delivery of Entrepreneurship

Education

Lecturers were asked to give their views on effects of delivery of entrepreneurship education in public universities. The lecturer can adopt the pedagogical approaches that are appropriate to a particular topic, can also minimize the obstacles inherent in the curriculum; influence the entrepreneurship culture formation by availing the role models. The facilitator should ensure that immediate environment (learning environment) is conducive to learning. This will involve ensuring that the facilities and resources are available and accessible to students (Briga ,1996). Table 4.16: Shows lecturers responses to the delivery methods that they use to achieve the intended objective.

Table 21: Lecturers Response

Parameter	N	Min	Max	Mean	Std. Dev
Written classroom tests	32	1.00	5.00	3.9063	1.35264
Group presentation	32	1.00	5.00	3.8750	.97551
Term papers	32	1.00	5.00	3.4375	1.24272
Project work	32	1.00	4.00	3.1563	1.17572
Formal Presentation of projects	32	1.00	5.00	3.5625	1.31830

Lecturers were asked to give their views on effects of delivery of entrepreneurship education in public universities. Table 4.16 shows the mean of views of lecturers on effects of delivery of entrepreneurship education as follows, written classroom tests 3.9063, group presentation 3.8750, term papers 3.4375, project work 3.1563, formal presentation of projects 3.5625. The lecturers indicated that the method of assessment that they mostly used was the traditional methods; written classroom tests followed by term papers and group presentations. The traditional methods which are examination based of assessment alone are not very effective in the measurement of individual learning in entrepreneurship. The study is in contrast with the one done by Hynes (1996) and Fleming (1999) who emphasize that outputs of entrepreneurship education can be assessed on a tangible and intangible basis. Tangible outputs are viewed under assignments, presentations, reports, drawings, prototypes, products and exhibitions. An intangible effect is viewed in terms of goals achievements, skills/knowledge, confidence, decision making, problem solving, and communications. Also a study by Hynes (1996) points out the following assessment techniques are used at the University of Limerick; examination of set reading/lecturing material; project proposal submission, involving the formation of teams, project presentation and discussion. He suggests that the combination of the above assessment techniques allows testing and evaluation of various learning instruments used.

4.6.3: Hypothesis: Effects of Delivery of Entrepreneurship Education

H₀: There are no effects of delivery of entrepreneurship education on performance in public universities

H₁: There are significant effects of delivery of entrepreneurship education on performance in public universities

Table 22: Hypothesis: Effects of Delivery of Entrepreneurship Education

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.746	.598	.294	.74278

a. Predictors: (Constant), Delivery of Entrepreneurship Education

b. Dependent Variable: Performance

Adjusted R² is the coefficient of determination and indicates how the performance varies with delivery of entrepreneurship education. From table 22 the value of adjusted R² is .598. This implies that, there was a variation of 59.8% of performance which varied with delivery of entrepreneurship education.

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	43.713	1	43.713	79.231	.001 ^a
	Residual	103.171	187	.552		
	Total	146.884	188			

a. Predictors: (Constant), Delivery of Entrepreneurship Education

b. Dependent Variable: Performance

The ANOVA results indicate that the independent variables significantly (F=79.231, p=0.000) explain the variance in the level of delivery of entrepreneurship education.

The ANOVA results indicate that the independent variables significantly (F=5.342, p=0.001) explain the variance in the level of delivery of entrepreneurship education.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error				Lower Bound	Upper Bound
1	(Constant)	1.963	.270		7.269	.000	1.430	2.496
	Delivery of Entrepreneurship Education	.556	.062	.546	8.901	.000	.433	.679

a. Predictors: (Constant), Delivery of Entrepreneurship Education

b. Dependent Variable: Performance

One unit change in delivery of entrepreneurship education results in 0.013 units increase in performance.

4.7 Effects of Entrepreneurship Education on the Target Beneficiaries

It was also necessary to establish the effects of entrepreneurship education on the target beneficiaries. The questionnaires were administered to students, lecturers and entrepreneurs. The questionnaire on students was to establish their entrepreneurial capacity and the behavior capacity that entrepreneurial exhibit. The questionnaires on lecturers were to establish whether they can be able to start their own businesses and be on their own, and on the entrepreneur’s was to establish how the entrepreneurship education has impacted on their businesses.

4.7.1 Effects on the Target Beneficiaries students

Table 4.18 shows the students who responded to the questionnaire on the effects of entrepreneurship education on performance on the target beneficiaries.

Table 23 : effects on the Target Beneficiaries Students

Parameters	N	Min	Max	Mean	Std. Dev
Starting a firm and keep it working would be easy for me	210	1.00	5.00	3.5659	.97504
I am prepared to start a viable firm	210	1.00	5.00	3.7969	.92523
control the process of creating a new firm	210	1.00	5.00	3.7969	.99889
how to develop an entrepreneurial project	210	1.00	5.00	3.7891	.97732
probability to succeed	210	1.00	5.00	4.0930	.80469
Risk taking	210	1.00	5.00	4.4341	.79888
Internal Locus of Control	210	1.00	5.00	4.2500	.83241
Persistent	210	1.00	5.00	4.4186	.84500
Determination	210	1.00	5.00	4.6667	.69970
Creativity	210	1.00	5.00	4.6250	.70989

Table 23 shows the response of students on the effects of entrepreneurship education on the target beneficiaries. Students were asked various aspects on how they think entrepreneurship has been able to make them develop various aspects. From the table 23 the mean is above 2.5 that shows, entrepreneurship education had a positive effects on the target beneficiaries with the highest mean being the ability to instill determination 4.6667, creativity 4.6250 risk taking 4.4341, Persistent 4.4186 and internal locus of control 4.2500. The least effects was on the ability to start a viable firm at 3.7969, starting a firm and keeping it working 3.5659 and being able to control the process of creating a new firm. It therefore means entrepreneurship education had a positive effect in increasing student's awareness as a career possibility and increasing entrepreneurial intentions. This study concurs with the study carried by Daniel *et. al.*, (2008).

4.7.2 Effects on the Target Beneficiaries lecturers

Table 24 shows responses from thirty two lecturers who responded on the questionnaire on the effects of entrepreneurship education on the target beneficiaries.

Table 24: Effects on the Target Beneficiaries lecturers

Parameters	N	Min	Max	Mean	Std. Dev
Starting a firm is easy for me	32	3.00	5.00	4.6129	.55842
I am prepared to start a viable firm	32	3.00	5.00	4.4516	.67521
I can control the process of creating a new firm	32	4.00	5.00	4.6129	.49514
I know how to develop an entrepreneurial project	32	3.00	5.00	4.6774	.59928
If I tried to start a firm, I would have a high probability to succeed	32	3.00	5.00	4.5806	.56416

Table 24 shows 32 lectures responded with the mean above 2.5 and a small standard deviation which is widespread on the effects of entrepreneurship education on the target beneficiaries. The highest being the ability to develop an entrepreneurial project 4.6774, process of creating a new firm 4.6129 Starting a firm and keep it working 4.6129 prepared to start a viable firm 4.4516, and I would have a high probability to succeed if I start a new firm 4.5806. This study compares favorably with the study done by Daniel (2008) which concluded that students engaged in academic entrepreneurship programs have higher intentions to start their own businesses in the future.

4.7.3 Effects on the Target Beneficiaries Entrepreneurs.

In operating a business enterprise sales turnover is necessary. The amount of sales per annum at start up time and at the present is shown in Table 25 for the entrepreneurs who responded.

Table 25: Effects on the Target Beneficiaries on Entrepreneurs.

Initial sales			Present sales			
in '000 Shs	N	%	in '000	N	%	% change
300-599	13	17	300-599	5	7	-60
600-899	11	15	600-899	8	11	-25
900-1199	8	11	900-1199	11	15	25
1200-1499	8	11	1200-1499	16	21	50
1500-1799	16	21	1500-1799	8	11	-50
Above 1800	19	25	Above 1800	27	36	43
Total	75	100		28	100	

From Table 25 it has been shown most entrepreneurs (25 per cent) had a sales turnover above 1.8 million initially, followed by sales of between 1,500,000-1,799,000 with 21 percent, 300,000-599,000 17 percent. At present the entrepreneurs with sales above 1.8 million increased to 36 percent representing a 43 percent change. The entrepreneurs with sales of between 300,000 to 599,000 decreased to 5, presenting only 7 percent. Those entrepreneurs who had sales turnover exceeding 1 million were in construction business consultancy, selling general merchandise distribution of spirits, Automobile services, Agrochemicals and Animal feeds. Those

businesses that had sales of less than a million were in procurement, selling of property, training services, retail and distribution. All the businesses have increased the sales turnover as indicated on the table. Those that have sales exceeding 1 million have increased from 19 to 27 representing an increase of 43 percent. The firms with sales of between 300,000 and 599,000 have decreased from 13 to 5 representing 60 percent change. The firms with sales of 600,000 to 899,000 have also increased from 11 to 8 representing a change of 21 percent. The changes in the sales turnover indicate the expansion of the businesses. Most of the entrepreneurs started their businesses with own savings the source of savings from the employment, sale of Asset or from other investments. All the respondents did not indicate the value of land and building at the start of the business or at the present value. This shows that all the entrepreneurs had rented premises for their businesses. The entrepreneurs indicated that there was an increase in net profit for their businesses.

The profit margin varies with the nature of the business, with those businesses in Automobile, construction and real estate showing a high profit margin as compared with the businesses in retail and distribution. Most entrepreneurs indicated that those enterprises in distribution had increased their employees by 15 percent, in the Automobile by 10 percent, in training and consultancy by 20 percent, retail by 8 percent, real estate by 5 percent and in construction by 40 percent. The increase in the number of employees is reflected by the increase in the sales turnover of the businesses.

The entrepreneurs indicated that the challenges that they encounter in starting and managing their enterprises includes competition among the existing entrepreneurs whereby some could undercut others in order to win the tenders, the economic environment due to changes in consumer Purchasing power being affected by inflation, Government policies being not conducive for operations and finances for expansion purposes. In order to overcome the above challenges the entrepreneurs indicated that they normally bribe the government officers so that they don't pay the taxes, selling of low quality product and sub-contracting.

4.7.4 Hypothesis: Entrepreneurship Education on the Target Beneficiaries.

H₀ There is no effects of entrepreneurship education on the target beneficiaries on performance in public universities.

H₁: There are significant effects of entrepreneurship education on the target beneficiaries on performance in public universities.

Table 26: Hypothesis effects on the Target Beneficiaries.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.743	.552	.549	.59347

a. Predictors: (Constant), Target Beneficiaries

b. Dependent Variable: Performance

The coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R² equals 0.549 this implies that, there was a variation of 54.9% of performance varied with delivery of entrepreneurship education. The P- value of 0.000 (less than 0.05) that

we accept the alternative hypothesis that there is a significant effect of entrepreneurship education on the target beneficiaries in public universities at the 95% confidence level.

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	81.021	1	81.021	230.041	.000
	Residual	65.862	187	.352		
	Total	146.884	188			

a. Predictors: (Constant), Target Beneficiaries

b. Dependent Variable: Performance

The ANOVA results indicate that the independent variables significantly (F=230.041,p=0.000) explain the variance in performance.

Coefficient

Model		Unstandardized Coefficients	Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Beta			Lower Bound	Upper Bound
1	(Constant)	.979		4.360	.000	.536	1.421
	Target Beneficiaries	.770	.743	15.167	.000	.670	.871

a. Predictors: (Constant), Target Beneficiaries

b. Dependent Variable: Performance

4.8 Correlation analysis

Table 27: Pearson Correlation Coefficients Matrix

		Performance	Pedagogical Approaches	Relevance Curriculum	Delivery effects	Target Beneficiaries
Pearson Correlation	Performance	1.000	.733*	.712*	.654*	.534*
	pedagogical Approaches	.733*	1.000	.536*	.752*	.467*
	Relevance of Entrepreneurship Education Curriculum	.712*	.536*	1.000	.118*	.247*
	Delivery of Entrepreneurship Education	.654*	.752*	.118*	1.000	.247*
	Target Beneficiaries	.534*	.467*	.247*	.247*	1.000

Note: *Correlation significant at the level 0.001 (two-tailed)

The Pearson product-moment correlation coefficient is a measure of the strength of a linear association between two variables and is denoted by r . Basically, a Pearson product-moment correlation attempts to draw a line of best fit through the data of two variables, and the Pearson correlation coefficient was conducted to examine the relationship between variables, r , indicates how far away all these data points are to this line of best fit (how well the data points fit this new model/line of best fit). The Pearson correlation coefficient, r , can take a range of values from +1 to -1. A value of 0 indicates that there is no association between the two variables. As cited in Wong and Hiew (2005) the correlation coefficient value (r) range from 0.10 to 0.29 is considered weak, from 0.30 to 0.49 is considered medium and from 0.50 to 1.0 is considered strong. However, according to Field (2005), correlation coefficient should not go beyond 0.8 to avoid multicollinearity. Since the highest correlation coefficient

is (0.752) being indicated between delivery of entrepreneurship education and pedagogical approaches which is less than 0.8, there is no multicollinearity problem in this research. From the table below all the predictor variables were shown to have a positive association between them; with the strongest (0.752) being indicated between delivery of entrepreneurship education and teaching approaches, while the weakest (0.118) between delivery of entrepreneurship education and relevance of entrepreneurship education curriculum.

4.9 Strength of the model (correlation coefficient)

Analysis in Table 4.22 shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R equals 0.843, that is, target beneficiaries, relevance of entrepreneurship education, curriculum, delivery of entrepreneurship education, teaching approaches leaving only 15.7 percent unexplained. The P- value of 0.000 (Less than 0.05) implies that the model of employee's promotion is significant at the 5 percent significance.

Table 28: Model Summary

ANOVA^b

Model

		Sum Squares	of df	Mean Square	F	Sig.
1	Regression	93.144	4	23.286	79.730	.000 ^a
	Residual	53.739	184	.292		
	Total	146.884	188			

a. Predictors: (Constant), Target Beneficiaries, Relevance of Entrepreneurship Education Curriculum, Delivery of Entrepreneurship Education, Teaching Approaches

b. Dependent Variable: Performance

ANOVA findings (P- value of 0.00) in Table 28 shows that there is correlation between the predictor's variables (target beneficiaries, relevance of entrepreneurship education curriculum, and delivery of entrepreneurship education, teaching approaches) and response variable (Performance). An F ratio is calculated which represents the variance between the groups, divided by the variance within the groups. A large F ratio indicates that there is more variability between the groups (caused by the independent variable) than there is within each group, referred to as the error term Pallat (2005). A significant F test indicates that t the null hypothesis can be rejected which states that the population means are equal.

Table 29: Coefficients of regression equation

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.240	.258		.930	.354
	Teaching Approaches	.294	.077	.297	3.798	.000
	Relevance of Entrepreneurship Education Curriculum	.230	.070	.188	3.290	.001
	Delivery of Entrepreneurship Education	.013	.062	.013	.215	.001
	Target Beneficiaries	.421	.077	.406	5.445	.000

a. Dependent Variable: Performance

The established multiple linear regression equation becomes:

$$Y = 0.240 + 0.294X_1 + 0.230X_2 + 0.013X_3 + 0.421X_4$$

Where

Constant = 0.240, shows that if target beneficiaries, relevance of entrepreneurship education curriculum, delivery of entrepreneurship education, teaching approaches all rated as zero, Performance would be 0.240

X₁= 0.294, shows that one unit change in pedagogical approaches results in 0.294 units increase in Performance

X₂= 0.230, shows that one unit change in relevance of entrepreneurship education curriculum results in 0.230 units increase in Performance

$X_3 = 0.013$, shows that one unit change in delivery of entrepreneurship education results in 0.013 units increase in Performance

$X_4 = 0.421$, shows that one unit change in target beneficiaries results in 0.421 units increase in Performance

4.10: Test of hypothesis

i) H_0 There is no effect of pedagogical approaches to entrepreneurship education performance used in public universities.

H_1 : There is significant effect of pedagogical approaches to entrepreneurship education performance used in public universities

ii) H_0 : There is no relevance of the entrepreneurship education curriculum on performance in public universities.

H_1 : There is significant relevance of the entrepreneurship education curriculum on performance in public universities.

iii) H_0 : There is no effects of delivery of entrepreneurship education on performance in public universities

H_1 : There are significant effects of delivery of entrepreneurship education on performance in public universities

iv) H_0 There is no effect of entrepreneurship education on performance on the target beneficiaries in public universities.

H_1 : There is significant effect of entrepreneurship education on performance on the target beneficiaries in public universities

Table 30: Hypothesis testing

Hypothesis	Coefficient P-Values	Conclusion
H ₀ : There is no effect of pedagogical approaches to entrepreneurship education on performance used in public universities.		Accept H₁. Reject H₀
H ₁ : There is significant effect of teaching approaches to entrepreneurship education on performance used in public universities	P=0.000<=0.05	
H ₀ : There is no relevance of the entrepreneurship education curriculum in public universities.	P=0.001<=0.05	Accept H₁. Reject H₀
H ₁ : There is significant relevance of the entrepreneurship education curriculum on performance in public universities.		
H ₀ : There is no effects of delivery of on entrepreneurship education on performance in public universities		Accept H₁. Reject H₀
H ₁ : There is significant effects of delivery of entrepreneurship education on performance in public universities		
H ₀ : There no effect of entrepreneurship education on the target beneficiaries in public universities.	P=0.000<=0.05	Accept H₁. Reject H₀
H ₁ : There is significant effects of entrepreneurship education on the target beneficiaries on performance in public universities		

4.11 Summary

The research was conducted on a sample of 420 respondents drawn from the target population of 1375 students, lectures and entrepreneurs in Public universities namely: JKUAT, Kenyatta and Nairobi. However, only 317 questionnaires administered were received from the sample size of 420. The results of the study indicated that most of the lectures have started their own businesses, 75% have small business enterprise and 28% do not have. 40% had started the businesses before they did masters and 60% after the masters degree. The fact that most lectures have started their own businesses is a good indicator that they can use their own experience when teaching entrepreneurship.

From the results presented it is evident that the lecturers for the undergraduates use mostly lecture method followed by experience stories, discussion, demonstration case studies and the least used method is role play and guest speakers. On the assessment methods, lecturers used mostly the written classroom tests followed by the term papers, group presentation and project work. Though the students indicated that the use of classroom tests assisted them to understand the subject, the use of case studies and individual assignments could be more effective. The lecturers who responded on the pedagogical approaches that lecturers used preferred the experience stories, discussion, demonstration, role play and the use of the guest speaker. The students indicated that the entrepreneurship curriculum had impacted on them in impacting practical skills and wider skills on how to identify business opportunities, operate a

business and manage an enterprise. Those skills are important as they enable one to start and manage a business.

Majority of the students indicated that they were willing to start their own business after they had been taught entrepreneurship and be on their own. They also stated that they know the process of starting a new venture and once they start business the probability to succeed is high. The students indicated that entrepreneurship education has enabled them develop some important attributes that are necessary for them that are necessary in starting, operating and managing a business, those attributes includes risk taking propensity, persistent, high need for achievement internal focus of control, determination and creativity.

CHAPTER FIVE

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study, findings, conclusions and recommendations for action and future research areas. The main objective of the study was to explore the determinants influencing the performance of entrepreneurship education in public universities in Kenya.

5.2 Summary

The purpose of this study was to investigate the determinants that influence the performance of entrepreneurship education in public universities in Kenya. These determinants include the effect of pedagogical approaches to entrepreneurship education performance, the relevance of the entrepreneurship education curriculum on performance, assess the mechanism of delivery of entrepreneurship education on performance and the effects of entrepreneurship education performance on the target beneficiaries. On the basis of empirical and theoretical literature performance of entrepreneurship education is influenced by the entrepreneurial success themes, business knowledge and skills, business plan utilization, learning approaches the facilitator and the programme context.

The literature review covered theoretical and empirical evidence on entrepreneurship education in Kenya and in other selected countries. Theoretical evidence covered theories of entrepreneurship which is the resource based theory that includes the knowledge training and experience of the entrepreneur and the team of employees and

managers. On the other hand conceptual framework covered the determinants that influence entrepreneurship education performance. Also the thematic model covers the models that have been applied to teach entrepreneurship education. Those models include entrepreneurial performance education model, entrepreneurial education model and the integration of the two models. The sample population consists of 420 students, lecturers and entrepreneurs from JKUAT, Kenyatta and University of Nairobi. Data were collected through questionnaires and interview schedule that was personally administered. Analysis of data was made using percentages, means, standard deviation, use of ANOVA and multiple regression analysis was tested.

The summary of the findings as per the objectives of the study include:

5.2.1 The effects of pedagogical Approaches to Entrepreneurship Education performance used in Public Universities

From the results presented it is evident that the lecturers for the undergraduates use mostly lecture method followed by experience stories, discussion, demonstration case studies and the least used method is role play and guest speakers. Role play and the use of guest speakers could be more effective than the other methods but are rarely used due to the fact that lecturers want to use the method that they can cover more materials given the time constraint. The use of role play and guest speakers could also be more effective as the methods could assist the students understand the concept taught.

On the assessment methods, lecturers used mostly the written classroom tests followed by the term papers, group presentation and project work. Though the

students indicated that the use of classroom tests assisted them to understand the subject, the use of case studies and individual assignments could be more effective. The lecturers who responded on the pedagogical approaches that lecturers used preferred the experience stories, discussion, demonstration, role play and the use of the guest speaker.

The lectures indicated that they prefer lecture method followed by experience stories, case study, discussion, demonstration and the least used method is role play and the use of guest speakers. On the factors that hinder the pedagogical approaches of entrepreneurship education according to the lecturers was unavailability of the role models, financial resources, textbooks availability and lack of administrative support.

5.2.2 The Relevance of Entrepreneurship Curriculum on performance in public universities.

The analysis of the relevance of entrepreneurship curriculum on students shows that the curriculum had impacted on them positively to develop personal attributes such as motivation, to improve confidence, need to achieve, persistent, and improved attitude towards self employment. The students indicated that the entrepreneurship curriculum had impacted on them in impacting practical skills and wider skills on how to identify business opportunities, operate a business and manage an enterprise. Those skills are important as they enable one to start and manage a business.

According to Half man (2002), the content of entrepreneurship education partly motivational and partly focused on formal and practical knowledge and skills, existing credit systems, book-keeping, marketing and business plan is compulsory. The content of curriculum has an effect on the teaching approaches to be adopted by the trainer. It also affects the obstacles encountered, the learning approaches to be adopted and pedagogical approaches to use. A well developed curriculum will lead to enhancement of entrepreneurship culture and there will be many start-ups. The curriculum of entrepreneurship should cover such topics as entrepreneurship and self-employment, entrepreneurship opportunities, motivation, creativity and innovation, enterprise management, technology and book-keeping.

5.2.3 Assess the delivery mechanism of entrepreneurship education on performance in public universities.

The trainer can adopt the pedagogical approaches and styles that can affect the outcome (dependent variable). The trainer can adopt pedagogical approaches that are appropriate to a particular topic, can also minimize the obstacles inherent in the curriculum and can influence the entrepreneurship culture formulation by availing the role models. The student views on the effectiveness of delivery of entrepreneurship education indicated favorable score showing that the students understand the objectives of the course; the coverage was fairly good, the methods adopted were appropriate and the lecturers were impacting on practical skills that are necessary to start and manage a business. The lecturers methods of assessing students that they use in order to make the course effective was mostly written classroom tests use of group

presentation and formal presentation of projects. The method that lecturers were not using frequently was the project work.

5.2.4 Effect of Entrepreneurship Education Performance on the Target

beneficiaries

Majority of the students indicated that they were willing to start their own business after they had been taught entrepreneurship and be on their own. They also stated that they know the process of starting a new venture and once they start business the probability to succeed is high. The students indicated that entrepreneurship education has enabled them develop some important attributes that are necessary for them that are necessary in starting, operating and managing a business, those attributes includes risk taking propensity, persistent, high need for achievement internal focus of control, determination and creativity. The lecturers who have been teaching entrepreneurship education and have not started their own businesses indicated that they were willing to start their own viable ventures, they also stated that they know how to develop an entrepreneurial project and incase they start a venture; they would have a high probability to succeed.

5.3 Conclusions

The research findings suggest that lecturers mostly use lecture method for teaching at the undergraduate level and discussion method. They also suggested that the time allocated for entrepreneurship teaching for the undergraduate is three hours per semester. Traditional classroom teaching, comprising lecture, discussions, group

work, theoretical problem Solving exercises and experienced stories are the most common methods of instructions. The other methods include the use of case study, role play, quest speakers, are demonstration are least used by the lecturers, although they could be more effective than the other methods that are mostly used. The lecturers rarely used the modern equipment while teaching, such as videos, power point and overhead projector, preferring to use mostly the whiteboard equipment which is provided by the institutions. The use of modern equipment could make learning more interesting and capture the attention of many learners. The lecturers also used written classroom tests and individual assessment method for evaluating their students. Students indicated the two common assessment methods helped them to understand entrepreneurship.

Findings on the relevance of entrepreneurship education curriculum indicated that, although some people are born with some attributes of an entrepreneur, teaching of the entrepreneurship can assist students to develop those attributes such as need for achievement, motivation, creativity, need for achievement and internal focus of control. The curriculum impacted on them positively to gain entrepreneurial skills of scanning the environment, identifying the business opportunities gathering the resources and starting a venture. Most students indicated that they may want to start their business showing that they had changed their attitude towards self employment.

The effectiveness of the entrepreneurship education is influenced by the lecturer who determines the outcome, by adapting to different teaching approaches that are

appropriate to a particular topic. The trainer is able to influence the attitude of the students by availing the role models and by being a role model himself or herself. Those lecturers who have had a prior experience in running their own business are more effective in the delivery of the course content. Also by choosing the appropriate assessment method the lecturers are able to make the teaching of entrepreneurship more effective with many lecturers preparing to use case studies and individual assessment which in the views of the respondents helped them to understand entrepreneurship.

The findings indicate that entrepreneurship education had a positive impact on the target beneficiaries who included the students, lecturers and entrepreneurs. As a result of being introduced to entrepreneurship most students indicated that they know the process of starting their own business and in case they start they may have a high probability to succeed. Students also indicated they had developed qualities that may enable them to start and run their own enterprises.

Most entrepreneurs indicated that though they had not written business plans for their businesses; they have in mind how their business ought to be guided and operated. They also indicated that their main motive has been to expand and diversify into different lines to minimize on the risk of relying on only one venture.

The above findings also concur with the regression results which confirm that the teaching approaches, the relevance of the entrepreneurship education curriculum,

effectiveness of delivery of entrepreneurship education and effects of entrepreneurship education on target beneficiaries are significant in influencing the performance of entrepreneurship education. The trainer should be well trained and affect the outcome; this is because the trainer will decide on the teaching approach to be adopted, the content to be covered and the learning styles to be adopted. The trainer can also reduce the limitations inherent in the teaching methods and other constraints that may affect learning.

5.4 Recommendations

The following recommendations were made for the study:-

- i) The curriculum in all the public universities should be harmonized so that the objectives to be achieved will be the same. The researcher noted that the course descriptions are similar but the topics taught are different. The topics that need to be taught include: entrepreneurship and self-employment, entrepreneurial opportunities, entrepreneurial awareness, entrepreneurial motivation and enterprise competencies and enterprise management. The skill building courses need to be introduced as opposed to management courses such as negotiations, leadership and creative thinking, exposure to technological innovation and new product development.
- ii) Entrepreneurship unit need to be introduced to the student when they are in the first year, so that they may develop the attribute necessary for self employment and change their attitudes early enough. During their final year of study, the students need to write a business plan that should be made mandatory in their trade areas.
- iii) Incubation centers can be introduced in all the public universities so that the students who come up with good ideas may be nurtured there. Within the incubation

the ideas are developed into products where the necessary infrastructure are provided that include space, marketing services and financial services. The university that has already started the incubation center is Kenyatta university

iv) There should be an annual business plan competition whereby all the students within the public universities are supposed to compete, and the students who come up with good business ideas are rewarded, this will encourage the students to be more serious when writing the business plan. Also those good business plans ideas can be incubated.

v) An association of the lecturers teaching entrepreneurship in public universities needs to be formed this should include the representatives from the Private Sector Alliance and other stakeholders. This would enable the teaching in the public sector to be harmonized, enable the networking between lecturers and other stakeholders. The stakeholders would be able to know the challenges encountered when teaching and make inputs on what they need to be included in the curriculum. The successful entrepreneurs should be called upon to share their experiences with the students on entrepreneurship.

vi) There is a need for the universities administration to include entrepreneurship in their mission statements. This would enable them realize the importance of entrepreneurship as a driving force in meeting the needs of the various stakeholders and in this new era of competition , whereby there is a lot of expansions by the universities.

vii) Guest speakers need to be invited every semester after the students have done entrepreneurship unit. This would be a follow-up that should be made compulsory for

all the students up to the final year of study. After attendance the students would earn some cumulative points that will be included as part of the assessment for the business plan in the final year.

viii) Mentorship programme need to be introduced in the public universities where students works under experienced entrepreneurs, in their trade areas, the mentors maybe selected by the universities who may work hand in hand with the lecturers of entrepreneurship. In order to achieve the objectives, a center of entrepreneurship programmes need to be established.

ix) On the teaching approaches to be adopted, feedback from students and lecturers on entrepreneurship education it is necessary to include the use of the case studies developed locally, use of the field visit to the enterprises, role model who are successful entrepreneurs and are respected in business circles. Those methods would supplement the use of traditional methods such as the lecture method and demonstration.

5.5. Areas for Further Research.

The researcher recommends the following areas for further research.

i) Since the research was carried out in the public universities, it is necessary to carry similar study in the private universities to find out whether similar results will be observed.

ii) A study can be carried before students are taught entrepreneurship to know their entrepreneurial orientation.

iii) Since the study dealt with the lecturers, students and the entrepreneurs it is necessary to carry similar study on other stakeholders to get their views on entrepreneurship education.

v) It is necessary to carry a study on students who have done entrepreneurship and have not started their businesses to get their views on why they have not started businesses despite the fact that they have been taught entrepreneurship.