INFLUENCE OF CLASSROOM PRACTICE OF HOME SCIENCE ON EMPLOYABILITY IN KAKAMEGA COUNTY: KENYA

BY

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APRIL, 2017
DECLARATION

I declare that this thesis is my original work and has not been presented for any degree in any other University/Institution for consideration. The research work has been complimented by referenced sources duly acknowledged. Where text data graphics, pictures or tables have been borrowed from other sources, including the internet, these are specifically accredited and references cited in accordance with anti-plagiarism regulations.

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CERTIFICATION

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DEDICATION

This thesis is dedicated to my late father Harrison, mother Margate daughter Patricia, and Brother Willis whose love and inspiration have contributed to my success in several spheres of my life. This work should be a realization of your dreams and an answer to your prayers.
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# TABLE OF CONTENTS

**DECLARATION**........................................................................................................................................................................ ii

**DEDICATION**........................................................................................................................................................................... iii

**ACKNOWLEDGEMENT**................................................................................................................................................................... iv

**TABLE OF CONTENTS**.................................................................................................................................................................... v

**LIST OF TABLES**.......................................................................................................................................................................... viii

**LIST OF FIGURES** ........................................................................................................................................................................ ix

**ABBREVIATIONS AND ACRONYMS** ............................................................................................................................................. x

**ABSTRACT**.................................................................................................................................................................................. xi

1.0 Introduction................................................................................................................................................................................ 1

1.1 Background to the Study............................................................................................................................................................ 1

1.2 Statement of the Problem............................................................................................................................................................ 4

1.3 Purpose of the study.................................................................................................................................................................... 5

1.4 Objectives of the study............................................................................................................................................................... 5

1.5 Research Questions.................................................................................................................................................................... 5

1.6 Significance of the Study............................................................................................................................................................ 6

1.7 Scope of the Study.................................................................................................................................................................... 7

1.8 Limitations of the Study............................................................................................................................................................ 7

1.9 Assumptions of the Study.......................................................................................................................................................... 7

1.10 Theoretical Framework.......................................................................................................................................................... 8

1.11 Conceptual Framework.......................................................................................................................................................... 10

1.12 Operational Definition of Terms........................................................................................................................................... 12

**LITERATURE REVIEW** ............................................................................................................................................................... 14

2.0 Introduction................................................................................................................................................................................ 14
2.1 The Concept of Unemployment .............................................................................. 14
2.2 Concept of Vocational and Vocationalised Education ........................................ 15
2.3 Vocationalisation of Secondary School education in Kenya .................................. 15
2.4 Tackling Unemployment through Vocationalisation ............................................. 16
2.5 Development of Home Science as a Subject ......................................................... 17
2.6 Methods of Teaching Home Science ..................................................................... 19
2.7 Vocational Skills in Home Science ....................................................................... 21
2.9 Summary of Literature Review ............................................................................. 25

RESEARCH METHODOLOGY .................................................................................. 26
3.0 Introduction ........................................................................................................... 26
3.1 Research Design and Locale .................................................................................. 26
3.1.1 Research Design ............................................................................................... 26
3.1.2 Locale of the study ............................................................................................ 26
3.2 Target Population .................................................................................................. 27
3.3 Sampling Techniques and Sample Size .................................................................. 27
3.4 Data Collection Instruments .................................................................................. 28
3.4.1 Questionnaires .................................................................................................. 28
3.4.2 Interview Schedules ........................................................................................ 29
3.5 Piloting and Pretesting ........................................................................................... 29
3.6 Validity and Reliability of Data Collection Instruments ......................................... 29
3.6.1 Validity of the Study Instruments .................................................................... 30
3.6.2 Reliability of the Study Instruments .................................................................. 30
3.7 Data Analysis ......................................................................................................... 31
3.8 Logistical and Ethical Considerations ..................................................................... 31

PRESENTATION, INTERPRETATION AND DISCUSSION OF FINDINGS ... 33
4.0 Introduction ............................................................................................................. 33
4.1.1 Response Rate .................................................................................................... 34
4.2 Demographic Characteristics of Respondents ..................................................... 35
4.2.1 Demographic Characteristics of Students ....................................................... 37
4.2.2 Demographic Characteristics of Head Teachers .............................................. 38
4.2.3 Demographic Characteristics of Home Science Teachers ................................ 39
4.3 Sensitization on the problem of unemployment among the youths ................... 41
4.4 Classroom practice in Home science ..................................................................... 46
4.5 Competencies developed through Home Science that are related to employability ...... 49
4.6 Challenges affecting the teaching and learning of Home Science in Secondary Schools ......................................................................................................................... 54

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS ........................................... 58

5.0 Introduction ............................................................................................................. 58
5.1 Summary of the Study Findings ........................................................................... 58
5.1.1 Sensitization on the problem of unemployment among the youths ............... 58
5.1.2 Methods used in teaching Home science ......................................................... 59
5.1.3 Competencies developed through Home Science that are related to employability ...... 60
5.1.4 Challenges affecting the teaching and learning of Home Science in Secondary Schools ................................................................................................................................. 61
5.2 Recommendations .................................................................................................. 63
5.3 Suggestions for further research .......................................................................... 65

APPENDIX I: STUDENTS’ QUESTIONNAIRE .......................................................... 74
APPENDIX II: QUESTIONNAIRE FOR HOME SCIENCE TEACHERS .................. 76
APPENDIX III: INTERVIEW SCHEDULE FOR THE HEAD TEACHERS ............... 78
APPENDIX IV: TEST FOR RESEARCH DATA CHARACTERISTICS ..................... 79
LIST OF TABLES

Table 3.1: Sampling Frame ........................................................................................................25
Table 4.1: Test of Sampling adequacy and Sphericity of data.............................................31
Table 4.2: Academic level of Head Teachers........................................................................35
Table 4.3: Teaching experience of Home Science Teachers..................................................37
Table 4.4: Nature of unemployment ......................................................................................39
Table 4.5: t-Test on mean differences as regards unemployment levels............................39
Table 4.6: Extent of engagement in the informal sector.........................................................40
Table 4.7: Chi-Square Results for overall trend in unemployment.......................................41
Table 4.8: Teaching Methods of Home Science ....................................................................43
Table 4.9: Correlation Coefficient for the Relationship between Home Science Subject and unemployment ..............................................................................................................46
Table 4.10: Correlation Coefficient for the Relationship between policy and effective teaching methods for Home Science Subject ..................................................................................48
Table 4.11: Regression Results showing the shortcomings in having Home Science on Secondary School curriculum ..................................................................................................................49
LIST OF FIGURES

Figure 1.1: Conceptual Framework.................................................................11

Figure 4.1: Age Brackets of Respondents.........................................................33

Figure 4.2: Gender of Students.......................................................................34

Figure 4.3: Gender of Head Teachers...............................................................35

Figure 4.4: Academic level of Home Science Teachers....................................36

Figure 4.5: Position in School..........................................................................38
ABBREVIATIONS AND ACRONYMS

CMS: Church Missionary Society
IE: Industrial Education
KCSE: Kenya Certificate of Secondary Education
KIE: Kenya Institute of Education
KNEC: Kenya National Examinations Council
MoEST: Ministry of Education, Science and Technology
NAPAHICA: Nairobi Provincial Art, Home Science, Industrial and Arts Competition
NACOSTI: National Commission for Science Technology and Innovation
NCEOP: National Committee on Educational Objectives and Policies
PDE: Provincial Director of Education
SPSS: Statistical Package for the Social Sciences
TIQUET: Totally Integrated Quality Education and Training
TVET: Technical and Vocational Education and Training
TVE: Training and Vocational Education
UNESCO: United Nations Educational Scientific and Cultural Organization

7-4-2-3: Is Kenya’s system of Education up to the year the year 1985. In this system, learners spent 7 years in primary school, 4 years in junior secondary, 2 years in senior secondary and 3 years at the university level

8-4-4: Is a system of education in Kenya where learners spend 8 years in Primary Schools, 4 years in Secondary Schools and 4 years at the University
ABSTRACT

Tackling unemployment through vocationalisation of education is a strategy that has worked in countries such as United States, Australia, United Kingdom, Switzerland and Mozambique among others. It is in the light of this that the study sought to evaluate the methods of teaching Home Science in secondary schools for the purpose of informing policy on quality education delivery in vocational education. Home Science is a vocational subject which, if effectively taught; impacts learners with practical skills and attitudes necessary in equipping graduates with the ability to transform themselves into self-employed citizens. This study sought to investigate the influence of classroom practice of Home Science on employability in Kakamega County. The study objectives were; to create sensitization on the problem of unemployment among the youths in Kakamega County, to examine the methods used in teaching Home Science in Secondary Schools in Kakamega County, to identify the competencies developed through Home Science that are related to employability in Kakamega County and to establish the challenges affecting the teaching and learning of Home Science in Secondary Schools in Kakamega County. The study adopted a descriptive survey design in which 188 respondents were sampled to take part. Respondents were identified from Secondary Schools in Kakamega Central teaching Home Science subject. Respondents from the study included students, Home Science teachers and head teachers. The study used questionnaires for Home science teachers and students and an interview schedule for head teachers in collecting data. To ascertain validity of data collection instruments, a pilot study was undertaken before administering the instruments to respondents and feedback from the pilot study informed the corrections in the data collection instruments. Reliability of data collection instruments was ascertained through the use of test-retest method where Cronbach’s Alpha coefficient was computed and found to be reliable. Both descriptive and inferential statistics were employed in the process of data analysis. Study data was analysed using Statistical Package for the Social Science (SPSS) version 22.0 for windows. Descriptive statistics included frequencies and percentages. These were used to summarize and describe the study data. Inferential statistics used in the study included regression analysis, t-test, Pearson Product Moment Correlation Coefficient and Chi-Square. Inferential statistics were used to determine independence of scores and relationships between and among study variables. All statistical procedures were computed at 95% confidence level. Study findings revealed that there were significantly high rates of unemployment in Kakamega County. It was also found that class room lecture method, practical method, discussion method, group work, field work and project methods were the preferred methods for teaching Home Science in Secondary Schools in Kakamega County. Further still, the study established that offering Home Science in Secondary Schools in Kakamega County did not have a significant relationship with unemployment trends and that there was a statistically significant positive relationship between policies and effectiveness of teaching methods for Home Science in Kakamega County. The study has stretched the frontiers of knowledge with regard to the relationship between teaching methods and effectiveness of delivery on vocational subjects. Recommendations have been made regarding a number of measures that could enhance the quality and relevance of Home Science and other vocational education subjects in creating employment especially for the youthful school leavers. These measures include stakeholder involvement, limiting the number of schools teaching vocational subjects to only those with adequate equipment and increasing funding to support effective teaching and learning of vocational courses among others.
CHAPTER ONE
INTRODUCTION

1.0 Introduction
This chapter presents background of the study, statement of the problem, objectives of the study and research questions. Further still, assumptions and limitations of the study, theoretical framework, conceptual framework and the operational definition of terms have also been covered.

1.1 Background to the Study
Whereas secondary education was once viewed as academic preparation for entrance into higher education, over the years greater attention has been given to the relevance of what is taught at the secondary School level to preparing graduates for the world of work. This in so doing meets the needs of not only those who go into higher education but also those likely to get paid or self employment immediately after completing secondary school. It is where the relevance of vocationalisation comes in. Vocationalising education provides more training opportunities for the increasing number of students completing school with a view to preparing them for self-employment through the promotion of the requisite practical skills, knowledge and attitudes.

Vocationalised Secondary education is here understood as being a curriculum which remains overwhelming “general” or academic in nature, but which also includes vocational or practical subjects as a minor portion of the timetable during the Secondary School course. The greater that portion becomes, the more training and vocational education (TVE) is required in terms of time and objectivity for purposes of employment preparation.
A “diversified” curriculum structure can be seen as a means to greater equality of opportunity because it would purportedly cater to a wider range of talents and prepare for a wide range of future activity than to purely academic curriculum. This view has historically been part of the rationale for comprehensive secondary schools in many countries. There is the international influence of the US high schools Model. Some African countries have historically been influenced by North American or by Soviet models of comprehensive secondary school. Vocationalisation of Secondary Education Revisited (Maclean and Wilson, 1999).

In Ghana, a key feature of the 1987 Education Reform Programme was the provision of vocational education at both the 3 – year junior and 3 – year Senior Secondary School level in order to equip students with skills for paid or self employment. All junior secondary school (JSS) students were to study a ‘pre-technical’ subject (Akyeampong, 2005).

The Botswana government newspaper, Daily News (7 October 2002) reported that president Festus Mogae had the following to say at the 30th Anniversary of Manu Senior Secondary school. The primary focus of Botswana has been to prepare Botswana for a transition from traditional agro-based economy to an industrial one… diversified and expanded curriculum that includes practical subjects that would enhance the development of entrepreneurship and employment skills among school leavers (Weeks, 2005).

In Kenya, Vocationalisation on a large scale was chosen in the 8 – 4 – 4 reform of 1986, in order to help the transition of Secondary school leavers into employment and further vocational training. A practical oriented curriculum was to offer skills for a wide range of employment opportunities. The new system was to ensure that students graduating at every level would have
some scientific and practical knowledge that could be utilized for self-employment, or further skills training. There was also some concern with preparing students so that they would better adjust to the domestic worlds. All secondary schools were required to offer vocational subjects. (Mwiria, 2005).

The issue in the African countries, at the heart of policy debate on vocationalisation has undoubtedly been “economic relevance”. By teaching vocational skills, the hope has been that students would more easily find work when they leave school, and become more productive and trainable, sometimes a declared goal in preparation for self-employment.

This research is an extension to the study on Vocationalisation of Secondary Education in Kenya by Kilemi Mwiria (2005) prepared for the Vocational Skills Development Review, which was carried out in 2002 – 2005 by the Human Development Department in the World Banks Sub-Saharan Africa regional department. The study yielded discouraging findings on the failure of vocationalisation in Kenya. It provided a review on the results of implementation of the vocationalised reform (8-4-4) system of secondary education. Under the 8-4-4 system the secondary school curriculum was expanded to include a number of practical subjects that prepared learners for practical challenges of the labour market and industry in general. Some of the applied subjects such as Home science, Agriculture, Business studies (Accounting, Commerce and Economics), and Industrial Education were introduced into the curriculum prior to 1986.

This research narrows the problem and selects to study an individual vocational subject; Home Science, reviewing the methods of teaching Home Science with the rationale of assessing if the
learning outcome translates into employment. The employment factor is the expected outcome of the 8-4-4 reform, a system introduced to vocationalise the school education in Kenya. Exploring a narrower scope, Home Science for this matter provides a clear link of skills taught and how they apply for a secondary school leaver to get paid or self-employed. It is upon this backdrop that the study sought to investigate the influence of classroom practice of Home Science on employability in Kakamega County.

1.2 Statement of the Problem
The specific objective of vocationalising the education system in Kenya was to enable Secondary School leavers to join the labour market with requisite skills and also enable them to access opportunities for further training in relevant institutions of higher learning. Therefore each vocational subject taught was to produce skills that would positively impact on employment in a respective area of job creation, tackling the challenge of youth unemployment crisis.

While the objective remains worth, there is need to assess the success of the reform measures implemented for the policy in order to ascertain if intended objectives set for vocationalisation are being attained. It was thought prudent that pilot studies may be launched for independent research to study specific vocational subjects and how their curriculum is delivered since the result determines the skills and attitudes learned which directly transform into employability.

It is in this context that this study sought to investigate the influence of classroom practice of Home Science on employability in Kakamega County.
1.3 Purpose of the study
The purpose for this study was to investigate the influence of classroom practice of Home Science on employability in Kakamega County

1.4 Objectives of the Study
The main objective of the study was to investigate the influence of classroom practice of Home Science on employability in Kakamega County

The study was guided by the following specific objectives;

i. To create sensitization on the problem of unemployment among the youths in Kakamega County

ii. To examine the methods used in teaching Home Science in Secondary Schools in Kakamega County

iii. To identify the competencies developed through Home Science that are related to employability in Kakamega County

iv. To establish the challenges affecting the teaching and learning of Home Science in Secondary Schools in Kakamega County

1.5 Research Questions
The key questions that this study raised around methods of teaching Home science and their impact on youth unemployment crisis are as follows:

i. What is the extent of sensitization on the problem of unemployment among the youth in Kakamega County?

ii. What are the methods used in teaching Home Science in Secondary Schools in Kakamega County?
iii. What are the competencies developed through Home Science that are related to employability in Kakamega County?

iv. What are the challenges affecting the teaching and learning of Home Science in Secondary Schools in Kakamega County?

1.6 Significance of the Study

Findings of the study have stretched the frontiers of knowledge with regard to what learning institutions and policy makers in government need to do to successfully implement Home Science curriculum in schools. The study has also highlighted the relative significance of vocational education to students beyond secondary school. Each year, Universities and other higher learning institutions in Kenya graduate students at a very high population into the job market that is already crowded with unemployed youth. This is as a result of huge success on the privatization of the education system in Kenya that has opened way for high competition for those investing in the education industry. It has led to many learners accessing education at competitive and relatively affordable fee rates. Likewise there is a good population of unemployed youths who are Secondary School graduates who have not been able to access higher education, these will benefit from suggestions of this study as regards the importance of vocational education.

Scholars wishing to undertake research in the area of vocational education generally and Home Science Education in particular will use the findings of this study as a source of literature.

This study has recommended ideas to secondary school graduates who are not able to access higher level of training to competently implement programs based on workable ideas thereby being self – employed and creating jobs for others. Further still, graduates from higher learning
institutions need to remain open minded and embrace vocational training as a suitable solution to employment where white collar jobs may not be immediately available.

1.7 Scope of the Study
The study was conducted to determine how effective methods of teaching Home Science in Secondary Schools were in the process of preparing the youth for labour market. The study was conducted in Kakamega County which has the highest number of candidates registered for Home Science subject at K.C.S.E within the larger western Kenya region.

1.8 Limitations of the Study
This study focused on teaching methods used in curriculum delivery with regard to Home Science education in secondary schools. Purposely, the study assessed if Home Science teaching methods indeed imparted learners with essential skills for job creation. It is worth noting that there could be a number of respondents who opted for Home Science and succeeded in creating employment opportunities for themselves mainly through motivation by other factors other than the skills acquired from school. Such other factors could be family traits of doing business, enough capital resources to stimulate business ventures or imitating successful friends.

1.9 Assumptions of the Study
The study held the following assumptions;

(i) Effective methods employed in teaching Home Science translate into expected learning outcomes

(ii) There was a relationship between the learning outcomes of Home Science and ability to generate self-employment.
(iii) Expected learnt outcomes of Home Science were sufficient to create employment opportunities for the learners.

(iv) Students who opted to study Home Science in secondary school and who did not further their education beyond secondary school joined entrepreneurial ventures.

1.10 Theoretical Framework
This study was guided by social cognitive theory advanced by Albert Bandura (1986), a behavioral Psychologist who proposed that social and cognitive factors as well as behavior play important roles in learning. According to Bandura (1986), observational learning, also called imitation or modeling, is learning that occurs when a person observes and imitates someone else’s behavior. Effective Home Science teaching methods should be practical oriented, involving learning, observation, and demonstration. This exposes learners to real life situation which is essential particularly if practical skills need to be imparted. The capacity to learn behavior patterns by way of observing what others do reduces the burden associated with trial and error learning.

According to Bandura, most human learning is done by selecting, observing, and placing into memory the behavior of others. Bandura (1963) wrote ‘learning would be laborious, not to mention, hazardous if people had to rely on the effects of their own actions to inform them of what to do’.

Bandura (1963) further established that most human behavior is learnt observationally through modeling; from observing others, one forms an idea on how behaviors are performed and on later occasions, this coded information serves as a guide for action,
For instance when going on an industrial field trip, it is expected that a lot of learning takes place. Furthermore, getting information directly from personal observations as well as observation is usually more interesting than getting it from a video. Trips involve a learning experience that is multi-sensory in nature, bringing together visual, audio, tactile appreciation of the content being learnt. Trips are also a mode for learning through exploration. Unlike behaviorists, social learning theorists believe that something is learnt when an observer consciously attends to some behavior and then places that observation in long term memory. The observer has not yet performed the observed behavior so there have been no behavioral consequences, which behaviorists maintain are necessary for learning to occur. Bandura (1963) asserts that observational learning is a process that involves three steps: the learner has to pay attention to critical aspects of what is to be learnt, retain or remember the behavior and the learner must be able to reproduce or perform the behavior.

Ryan (1984) supports Bandura’s point of view by asserting that not all learning has to take place in the school of hard knocks. In fact civilization itself requires that we be able to capitalize on the experience of others. Artists and other talented people can make the experience of others accessible to us for enjoyment, edification, or both.

Practice and mental rehearsals used in direct instruction are processes that help learners to retain and produce observed behavior.

Hyggins (2000) established that the emphasis on self instruction, self talk, and self regulatory learning provides an important shift from learning controlled by others to responsibilities for one’s own learning. These self enacted strategies can significantly improve students; the above is
true for heuristic methods of teaching Home Science since they encourage the learner to think independently. These methods provide an opportunity for students to have a real world experience. They clearly illustrate and enhance information taught in the curriculum.

1.11 Conceptual Framework
The study was based on the concept which explains that delivery of quality Home Science education through use of effective teaching methods would improve chances of self employment among learners after Secondary School education.

The dependent variables were the scenario of self – employment while the independent variable is Home Science which is a vocational subject. Vocational education provides leaners with knowledge relating to a specific industry or trade under well-defined limitations. Home Science if efficiently delivered to learners through effective teaching methods, will impart practical skills necessary for creating jobs in related industrial field.

However, there exist intervening factors for the relationship between Home Science acquired skills and job creation to be maintained. The intervening variables include; Vocationalised Education, Resources, and Business Environment.

Vocationalised education is the teaching of knowledge and skills that enable the students to plan start and run their own business. Skills like problem solving, persistence, self regulation, teamwork, communication and responsibility can be acquired from vocational education and training.
Other intervening factors; resources particularly capital and human resources and a friendly business environment will provide ability for a skilled potential entrepreneur to develop and operate the business.
1.12 Operational Definition of Terms

In the context of this study, these terms were used to mean the following:

**Community Resource:** People, places, activities, and real things found within the community that have educational value.

**Descriptive Survey:** A survey that typically seeks to ascertain respondent’s perspectives or experiences on a specified subject in a pre-determined structural manner.
**Employment:** A relationship between two parties usually based on contract where work is paid for.

**Excursion:** A trip by a group of people usually made for leisure or educational purposes. It is often involves a journey or visit to a place sometimes for other purposes Experimental learning.

**Field trip:** This is travelling made by a person or a group of people to a place away from their usual place of residence. The purpose of such travel is normally to observe for education purposes or to provide students with experiences outside the everyday activities.

**Hands-on- experience:** Human interaction often with technology that involves active participation in a direct practical way.

**Home science:** A family centered area of study comprising Foods and Nutrition, Clothing and Textiles, Home Management, Consumer Education, and Child care.

**Instructional strategy:** The teacher’s approach to using information, selecting resources, and defining the role of the student. It includes specific practices used to accomplish a teaching objective.

**Learning:** A process that produces progressive series of changes in behavior and experience or a result.

**Self employment:** Earning a living through doing something by oneself

**Teaching:** A complex process of cooperation and inter-communication between the teacher and the learner

**Unemployment:** A situation where qualified work force is unable to secure permanent, contractual or part time jobs
CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction
This chapter discusses the literature related to the following areas; the concept of unemployment; Vocationalisation of Secondary education in Kenya; Tackling unemployment through vocational education; Home Science teaching Methods, Vocational Skills in Home science and summary.

2.1 The Concept of Unemployment
Unemployment is situation where academically qualified personnel are unable to secure job opportunities. It is a situation where qualified workforce is unable to secure permanent, contractual or even part-time jobs. Mohammed (2011) in his study notes that the Chief Executive Officer of Dangote Group, Alhaji Aliko Dangote (GCFR), said that in Nigeria a nation with over 50% of the populace being youths, youth employment is necessary and urgent. The country cannot develop as required if over half of its populace is unemployed due to lack of jobs or necessary skills. Most troubling is that the highest unemployment rate is found in the fast growing youth population. Therefore, Nigerian youths at the height of their productivity are under-employed, unemployed or unemployable.

According to the World Bank (2008), as chances of white collar jobs diminish, entrepreneurship among youths offer a way of their integration into the changing labour markets and enhancing their financial status. For some youth’s world over, entrepreneurship offers income, independence and a self-motivated path for the development of human capital. Also, youthful entrepreneurs can be more receptive of new income generation trends. Entrepreneurship is capable of unleashing the economic capabilities of youths and also offers new jobs while at the same time improving their economic autonomy. The youths can no more rely on permanent jobs
except self employment. Entrepreneurial training assists youths in acquiring new talents needed to tackle other life challenges. Non-cognitive skills, such as opportunity recognition, innovation, and decision making acquired through entrepreneurship may profit all youths irrespective of their choice to become or continue as entrepreneurs.

2.2 Concept of Vocational and Vocationalised Education
Both Vocational and Vocationalisation of education entails talent enhancement. While in vocationalisation, skills acquired are supposed to build one’s competence to act differently in real life situations, vocational education provides skills for a particular vocation within certain defined limitations. Without developing broad skills, the exact skill cannot assist one to survive life. In that respect vocational education is relevant in the development of general understanding of learners’ circumstances and shaping their behaviour to make their lives better. Hence, vocationalisation of education is vital to every education.

According to Ebede (2004), education vocationalisation is the imparting of skill that allows students to plan, start and run their own entrepreneurial ventures. Swartland (2009), observed that entrepreneurial education aims to arouse creativity in learners, enable them to spot chances for improvement and inspire them to convert ideas into practical activities in a social, cultural or economic context.

2.3 Vocationalisation of Secondary School education in Kenya
The commitment by Kenyan government to vocationalisation of secondary school education arises from the 1976 recommendations by the National Committee on Educational Objectives and Policies (NCEOP) (Kenya 1978). The committee also advocated for the reorganization of the education system in the country so as to efficiently meet basic needs. This could be achieved
through improving income generation chances for learners after high school and changing learners’ attitudes to favor vocational skills capable of stimulating self-employment. NCEOP’s recommendations later formed the foundation for streamlining Kenya’s education structure from the British 7-4-2-3 to American 8-4-4 education system. This was informed by the Presidential Working Party Report on Kenya’s Second University in (Kenya, 1984).

The KIE availed important policy document on the new education system (Kenya, 1984). In the light of the new policy, education was expected to offer learners with needed life skills by teaching technical skills as the main focus. Without taking into account the past talks on limitations of academics in influencing job-related achievement (Foster, 1965) the notion that academics generates employment was adopted without much research.

In an indirectly forceful way, a new commission report, Totally Integrated Quality Education and Training (TIQUET) into the Education System (Kenya, 1999), accords education with an added accountability of teaching a basis of basic techniques that enable a graduate to communicate well, work in teams with minimal direction, utilize IT in acquiring new modes of accomplishing tasks, enhance self-employment training as well as creative and innovative capabilities” (Kenya, 1999).

2.4 Tackling Unemployment through Vocationalisation

In brief, the policy documents cited broad aims for vocationalisation as: the provision of more training chances for the growing numbers of school-leavers in order to prepare them for self reliance by enhancing their practical skills and attitudes, promoting instruction and guidance that meets Kenya’s main economic growth in precise areas. These areas include Home Science,
Agriculture, Industry and Commerce, Building vocational entrepreneurial talents as the origin of more individual growth, enhancement of the creation of qualified artisans, technicians and technologists need in the countries formal and informal sectors, exposing learners to scientific trends, skills and ideas and promoting ultimate skills. These enable students to appropriately adjust to their work and domestic worlds via the inculcation of techniques that support creativity, cooperation, innovativeness and problem-solving skills and lastly, preparing learners for future post-secondary training.

Amusan (2004) is of the opinion that vocationalisation of education can offer learners with chances to examine their attitude, aptitude and skills concerning those practical skills important to owning a business or self employment. Vocationalisation intends to equip students with unusual traits, skills and managerial shrewdness for current and future needs. Onifade (2004) views self employment as an act of starting a business and taking on the associated risks.

As Sasaki (2006) revealed, youth self employment is a good means of promoting income generation among young people. Studies in African cities and municipalities have shown that employment for youths can be created by actively promoting education through vocationalisation.

2.5 Development of Home Science as a Subject
Long before Kenya was colonized, various societies in the country had their own indigenous education. Rafu (1973) observes that, African traditional education was supposed to fit children into the community by educating them to love and respect their families, clans, tribes, religion and traditions.
Girls were taught at home by mothers through demonstration. During such exercises, girls observed the tasks being performed very keenly after which they too performed these tasks. The mothers corrected the girls whenever tasks were not well performed. The kind of education described above is Home Economics. Kithinji (1990), writing on Home Economics as a profession says that, Home Economics is a discipline which has undergone a great revolution in definition, academic status, content and scope in many countries of the world. Its definition has developed over the years from humble beginning of cooking, sewing, house craft, mother care, house wifery, hygiene, domestic science, domestic economy, household management, to broader and more inclusive terms such as Home Science and Home Economics. The subject is called Home Science in primary and secondary schools while it is referred to as Home Economics in universities and other institutions of higher learning in Kenya.

Subjects related to Home Science were introduced in Kenya at Kikuyu in central Kenya as early as 1904. Anderson (1976) remarks that Watson taught Laundry at schools in Kikuyu in 1904. At Tumutumu in 1912, Maran Stevenson taught girls activities related to the house. In Western Kenya the work of Mrs. Moller at Ng’iya Girls and that of Miss Appleton of Church Missionary Society (C.M.S) are well known.

In 1924, the Phelph Stoke Education Commission introduced a new element, that of adopting the curriculum to the local situation. Areas which were emphasized included home life, industry, simple health, agriculture, and recreation. The report indicated that industrial education was to focus on the need for better housing, clothing and village industries such as weaving, leather work and basket making. The first Jeans school and native industrial training Depot was established at Kabete in 1925 and another one at Athi River in 1930. These two centers trained
the African men and their wives in various activities such as simple community life, child care, and industrial education. The Ominde report of 1964 saw the need to provide the type of education that met the needs of learners; it recognized the need for vocational element in the curriculum to be taught side by side with the academic element.

Bessey report (1972) observed that certain essential areas like House Wifery and Cookery were being neglected and that Needle work was being emphasized too much. The subject matter covered at that time dealt mainly with Needle work and since that time, Home Science started appearing as a fragmented subject. This trend continued up to mid 1980’s when the system of education changed to eight (8) years of primary education, four (4) years of secondary education, and four(4) years of university education.(8:4:4).With the introduction of 8:4:4, the subject was no longer fragmented as before.

2.6 Methods of Teaching Home Science
Gerlach and Ely (1971) define teaching method as a systematic plan for presenting information that is the ways and means adopted by a teacher to direct the learners’ activities towards an objective. Teaching methods and the type and quality of classroom interaction are important factors in the teaching process. Hyman (1970) had acknowledged this when he stated: “Teaching method of course is the utmost important aspect to everyone concerned with learning. No one without doing it in some particular way may have significant effect on the entire teaching and learning situation.”

Gerlach and Ely (1971) commented that an effective teacher has a multitude of techniques at his disposal and must be most efficient in teaching the learner to the desired terminal behavior. Hatcher (1963) suggested that in determining what technique to select, the teacher will need to
understand what values a particular teaching method possesses, how it operates and where it can be used to good advantage. The choice of a teaching method depends on the content and materials available. The Kenya National Committee on Educational objectives and Policies (Gachathi 1976) noted that “to make education relevant to the day-to-day problems, the teaching method has to aim at developing methods and the ability to gather data by observation of the environment.” This implies that the teaching method should expose the learners to the environment.

Sigot (1986) has also remarked that there is an apparent need for less emphasis on teacher-centered teaching skills such as the traditional demonstration and emphasis on student-centered activities such as problem solving, role playing, case studies and the use of facilities available in the community. This implies that emphasis needs to be placed on the skills of enquiry, on the methods of discovery, self directed learning and initiative. That is the student should be an active participant rather than the passive observer in the Home Science classes. However, Kiviu (1985) found out that the Home Science teachers spent more than half of their class time (62 percent) on explanations, narrations and description, all of which are teacher initiated talk, an indication of a teacher centered approach to teaching. This is similar to findings of studies done by Flanders (1970) and Perrot (1977). Kiviu (1985), further pointed out that discussions in groups, student projects and reports provide opportunities for students to learn materials given to them and allow interaction between teacher and student and among students themselves. This involvement is very significant to students’ learning. Teaching methods differ in efficiency and appropriateness for different objectives and subject content. Teachers therefore should learn to make decisions carefully as they chose content and objectives. Teaching methods chosen should be geared to increasing interest, participation and teaching effectiveness in the class work.
Field trips can encourage learners to be more thrilled about education. Experiencing things learnt in the classroom through field trips offer means in which learners can be motivated by the environment. Field trips offer exceptional learning opportunities that are unavailable in the classroom. They allow students to have a real world experience which clearly illustrates and enhances knowledge taught in the curriculum. Many students do not have the opportunity to go to new places, let alone see what they are learning. Attending a field trip can offer a new and welcomed experience for students who would not have them (Donohue 2011).

2.7 Vocational Skills in Home Science
Home Science is a knowledge area needed by learners of both genders to understand and be able to effectively handle their personal life, resources and eventually start a life that is self sustainable. Home Science is considered a vocational subject. Therefore, emphasis has been put on addition of various activities and small projects. The learners are required to complete these tasks using assets from the society so that they keenly engage in the learning process.

The main reason for teaching this subject at the Secondary level is to permit learners to develop the quality of their own life and also enhance their job creation skills.

The vocational skills learned through Home Science learning include: maintaining of a healthy environment, develop ability to take care of nutrition and cookery, develop basic skills related to textile products, develop skills in productive purchasing, encourage judicious use of resources through improved work habits and foster understanding of human developmental process by strengthening interpersonal relationships.
2.8 Challenges Facing Vocational Education and Training

Lauglo and Lillis (1988) posited that one dilemma which has preoccupied many countries for a long time is whether to concentrate investment in general or vocational education. But, in human capital terms, general education creates ‘general human capital’ and TVET leads to ‘specific human capital.’ The former has the advantage of flexibility and, therefore, the possibility of moving from one job to another, while the latter does not. In this regard, many people consider general education as a suitable type of education that is capable of responding to economic and labour force changes in society. On the other hand, technical and vocational education has the advantage of imparting specific job-relevant skills which make the worker more readily suitable for a given job and more productive. Hence, both are important. It is in this light that most educational systems in Africa try to combine both general and vocational streams of education in varying proportions to suit their educational goals and aspirations.

Conversely, Carnoy (1993) noted that, despite the advantages of imparting job-related skills and the high level of unemployment amongst those with general education, the recognition and preference for general education by the youth in the Sub-Saharan Africa is high. The reason for this is that personnel in administrative and leadership roles are generally chosen from people with a general education background. Therefore, talking about the importance of TVET, without any deliberate action to follow up the rhetoric, will not change its poor image and low status. Within the early 1990s, numerous concerns were raised about the effectiveness of TVET in Ghana. Nyankov (1996) summarised these concerns concluding, Poor quality in the delivery of TVET programmes, high cost of training; training not suited to actual socio-economic
conditions; disregard of the needs of the informal sector; and disregard of the labour market and high unemployment rate among graduates.

In an attempt to address these challenges, Reddan and Harrison (2010) argued that TVET institutions need to restructure their programmes to be responsive to the needs of the job market, especially the industry. To achieve this goal, TVET curricula must focus on outcomes in terms of the skills, knowledge and attitudes required industry. That is, TVET provision should be responsive to the demands of industry.

King and McGrath (2004) argued that with TVET being more diverse because of the changes in the labour market, it should be able to integrate the youth into the working world. Given the prevailing economic trend, UNESCO (2004) identified the two major objectives of TVET as the urgent need to train the workforce for self-employment and the necessity to raise the productivity of the informal sector. They point out that lack of resources have led to cuts in the volume of training provided in public institutions. These cuts are a hindrance to pursuing the critical objectives of providing training and raising production. Considering the expensive nature of TVET as a form of education, it is imperative that an expanded system with necessary and adequate facilities and equipment will lead to the effectiveness of the system.

Related studies carried out by Islam and Mia (2007) in Bangladesh revealed that both formal and non-formal TVET lacked an effective linkage between training and the world of work. It further noted that because of its lack of coherent mode, practical skills training which does not produce the requisite skills for the job market. Additionally, the trainees also lacked training experience, initiative and motivation to discharge their duties effectively.
Ngome (1992) noted that TVET in Sub-Saharan Africa attracted increasing attention during the 1970s, because of the expectations that practical skills training as offered by TVET institutions would address the need for skilled labour. As a result of these developments, many African governments started technical and vocational education institutions modelled after those of their former colonial powers. The technical skills acquired were supposed to raise individuals’ job prospects and productivity. As a result, enterprises were expected to become more competitive and make a greater contribution to economic growth, on condition that those trained in these institutions actually matched the requirements of the labour market.

However, public TVET institutions, according to Atchoarena and Esquieu (2002), continued to attract a great deal of criticism. First, they were unable to train skilled workers to meet the requirements of enterprises and were unaware of the need for continuing education. Second, they were extremely costly. Often, the graduates of these institutions joined the ranks of the unemployed, an indication that the training provided did not match the jobs available. In many countries, including Ghana, public TVET institutions have not been able to adapt to the new structure of the labour market and the new skill requirements of companies in both the formal and informal sectors.

It is commonly accepted that all forms of education will help people to improve themselves and to get better jobs, but many parents believe that only a university education will offer their children the opportunity to acquire a good job. As a result, many countries find that the number of graduates from universities far exceeds the capacity of the labour market to provide appropriate employment. At the same time, these countries are unable to attract enough people to train for those positions of greater need, which might be ‘blue collar’ jobs that might appear to involve manual labour, are dangerous, dirty and difficult (Commonwealth of Learning, 2001).
2.9 Summary of Literature Review

In summary, analysis from the literature review show that skills acquired by learning Home science empower one to create jobs, and thus solve the problem of unemployment. However, there is a gap that education if not of quality will not impact the necessary positive change on unemployment. It is under this context that this research was carried out to evaluate the methods of teaching Home Science and how this impacted on unemployment crisis.

This research is an extension to the study; Vocationalisation of Secondary Education: Kenya Case Study (Kilemi Mwiria) prepared for the Vocational Skills Development Review, which was carried out in 2002 – 2003 by the Human Development Department in the World Banks Sub-Saharan Africa regional department. It was an assessment of the current 8-4-4 system at secondary school level; to evaluate the performance and compare with intended objective which was to curb on unemployment crisis in Kenya. This study however, narrowed the problem down to evaluating a single subject; Home Science. This was necessary in order to investigate the specific skills learned and the specific potential related industries that they affect.
CHAPTER THREE
RESEARCH METHODOLOGY

3.0 Introduction
The chapter presents the study design and locale, study population and data collection, instruments and procedure, validity and reliability of instruments as well as data analysis procedure.

3.1 Research Design and Locale
This section describes the study design and the location of the study. An explanation is provided for reasons that informed the selection of the study design as well as the study area.

3.1.1 Research Design
The study used descriptive survey research design. This method was found appropriate because the research intended to explore the relationship between the different variables forming the study that’s methods of teaching Home Science and ability of Home Science subject to create self-employment for the learners. According to Mugenda and Mugenda (2003) descriptive survey design is considered to be relevant in a survey because it involves collecting data which can then be used to answer the research question in the current state of the object of the study. Sekaran (2010) asserts that surveys provide information about population variables. He adds that descriptive research studies are designed to obtain pertinent and precise information concerning the status of phenomena and whenever possible to draw valid general conclusions from the facts discovered.

3.1.2 Locale of the study
The study was conducted in Kakamega County. The county’s largest town; Kakamega is situated 52 kms North of Kisumu which is the 3rd largest city in Kenya. The county has a population of
1,660,651 and was ranked the second most populous county in Kenya by the national census of 2009. Despite the large population, Kakamega County has a poverty rate of 47.2% (Kenya County Fact Sheet). This reflects a gap in the relationship between growth in population and growth in development. It is under this context that this study was conceived.

3.2 Target Population
The study targeted seven public Secondary Schools in Kakamega Central Sub-County. Of these, four were Girls’ while three are mixed. The total number of students forming the study sample was 700 while 14 teachers and 7 Head teachers also formed the population. The above population was a realistic representation of the entire Sub-County.

3.3 Sampling Techniques and Sample Size
Purposive sampling technique was used to select the schools offering Home Science education, to select Head teachers of those schools and to select Home Science teachers from the selected schools. Simple random sampling technique was employed in selecting students to take part in the study.

According to Sekaran (2010) a sample size is representative if it is between 10% and 30% of the target population. The total population consisted of 700 students, 2 teachers from each of the seven schools and 7 head teachers, giving a total of 721.

Schools were categorized into two groups as Girls and Mixed. Out of the sample for Girls’ Schools, 140 were students, 9 were teachers and 5 were Head teachers. Out of the 78 respondents obtained from Mixed Schools, 70 were students, 5 were teachers and 3 head teachers. This gave
the study a sample of 231 which was 32% of the total population. The proportions of the sample from girls’ and mixed schools is presented in table 3.1.

Table 3.1: Sampling Frame

<table>
<thead>
<tr>
<th>School type</th>
<th>Students</th>
<th>Teachers</th>
<th>Head Teachers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls Secondary Schools</td>
<td>140</td>
<td>9</td>
<td>4</td>
<td>153</td>
</tr>
<tr>
<td>Mixed Secondary Schools</td>
<td>70</td>
<td>5</td>
<td>3</td>
<td>78</td>
</tr>
<tr>
<td>Total Sample</td>
<td>210</td>
<td>14</td>
<td>7</td>
<td>231</td>
</tr>
</tbody>
</table>

3.4 Data Collection Instruments

In order to fulfill the study objectives, data was collected by use of questionnaires for Home Science teachers and students and an interview schedule for Head teachers.

3.4.1 Questionnaires

The study used 2 questionnaires, one for Home Science teachers and another one for Home Science students. A 5 point Likert type scale ranging from 1(strongly agree) to 5 (strongly disagree) was used where respondents were required to put a tick against the answer that best described their opinion. The researchers employed the drop and pick method when administering the questionnaire and allowed respondents up to 10 days to respond to the questionnaire items at their convenience. In the process of developing the instruments, the researcher consulted the supervisors who are experts in this field. They assisted to verify that the instruments were appropriate for obtaining the needed information. In order to achieve the research objectives the questionnaire was designed to elicit accurate and relevant response from the respondents based on each of the research question and constructs on the conceptual frame work. Further, the questionnaire was used for data collection in this study because as Kothari (2006) observes that
questionnaire method offers considerable advantage in administration; it presents an even stimulus potentiality to large numbers of people simultaneously and provides the investigation with an easy accumulation of data.

3.4.2 Interview Schedules
An interview schedule was used to collect data from Head Teachers. The Head Teachers’ interview schedules had 11 items seeking information concerning Head Teachers’ perception on the use of community resources in teaching, if the school influenced learners’ choice of subjects and their attitude towards delivery of Home Science curriculum. Furthermore, it sought to establish the role of Home Science in school activities, short comings of having Home Science on the school curriculum and possible solutions to the challenges.

3.5 Piloting and Pretesting
Piloting which was carried out in one of the schools in the County involved a total of 20 students, one Home Science teacher and Head teacher. The purpose was to assist the researcher to discover weaknesses, if any in the research instruments, check the clarity of the items and also elicit comments from the respondents that would help in the improvement of the instruments. The researcher, with the assistance of two Home Science teachers administered the instruments. Feedback obtained from the pilot study enabled the researcher to make adjustments that improved the validity of data collection instruments.

3.6 Validity and Reliability of Data Collection Instruments
Procedures used to ascertain validity and reliability of instruments used in the study are discussed below.
3.6.1 Validity of the Study Instruments

Validity is the degree to which result obtained from the analysis of the data actually represents the phenomenon under study (Kothari, 2006). According to Sekaran (2010) validity refers to the accuracy of a measuring instrument in measuring the variable that it is intended to measure. The use of In-depth questionnaire enabled the researcher to have more insight into the responses provided. This was made possible by the fact that the researcher aligned the questions to research objectives. In addition, the instruments were piloted prior to commencement of the study so as to ensure that the questions were able to generate the required results in terms of construct and content validity. According to Mugenda and Mugenda (1999) construct validity is a measure of the degree to which data obtained from an instrument meaningfully and accurately reflect or represent theoretical concept to be measured. If the measurements are consistent with theoretical expectation then the data have construct validity. Teachers of Home Science in the sampled school. Experts in this field were also used to test for content validity.

3.6.2 Reliability of the Study Instruments

The reliability of a study has to do with the degree to which the measuring instruments used in the study yield consistent results or data after repeated trials (Kothari, 2006). Test-retest method was used to measure reliability of the data. The method involves administering the same instrument twice to the same group or subject and after keeping the initial conditions constant, administer the same test to the same subject after few weeks and then correlate the scores to determine the coefficient of reliability. If the obtained reliability coefficient is greater than or equal to the standard threshold of 0.70 used in behavioural research, then the instrument is said to yield data that have test – retest reliability.
The study instruments obtained a reliability index of 0.783 implying that the data collection instruments for the study were 78.3% reliable to measure the constructs of the study (See Cronbach’s Alpha index in appendix iv).

### 3.7 Data Analysis

The data obtained from the field was organized, edited to ensure completeness and consistency, classified and coded according to research hypotheses and objectives for analysis. They were analyzed by use of both descriptive as well as inferential statistical procedures with the aid of the Statistical Package for the Social Sciences (SPSS) version 22.0 for windows. Each question related to a variable was assigned a score or numerical value by use of likert scale method. The number on a likert scale was ordered such that it indicated the presence or absence of the characteristics being measured.

Pearson Product Moment Correlation Coefficient was used to investigate the relationships between study variables while Chi-Square was employed to investigate extent of independence of scores. Two sample independent t-test was conducted to establish significance of the differences between mean scores in the study while regression analysis was performed to determine the direction and magnitude of influence of the challenges to the implementation of Home Science curriculum in secondary schools. All statistical measurements were performed at 95% confidence level.

### 3.8 Logistical and Ethical Considerations

In order to undertake the study, the researcher obtained a research permit from the National Commission for Science, Technology and Innovation (NACOSTI). The permit was circulated to the relevant authorities including the Education Officer of Kakamega Central sub-county and the
schools where data was collected. Consent from the respondents to participate in the study was sought and only those willing to participate were engaged (Cohen et al., 2000). The respondents were adequately briefed on how to respond to the questionnaires.

All the respondents were also assured of the confidentiality of the data solicited. The data collected were used only for the purpose of this study and was not in any way shared with a third party. In no way did the researcher bribe or use other unconventional means to generate information for this study. This study strictly followed the laid down procedures of conducting research and reported findings objectively without malice or prejudice, as presented in the following fourth chapter.
CHAPTER FOUR
PRESENTATION, INTERPRETATION AND DISCUSSION OF FINDINGS

4.0 Introduction
This chapter contains summary of the study findings, interpretation of findings and discussion in relation to empirical studies on the influence of classroom practice of Home Science on employability among the youth in Kakamega County. The chapter is presented in line with the four objectives of the study. Both descriptive as well as inferential statistics were used in the process of data analysis. Descriptive statistics used included measures of dispersion and variability as well as measures of relative position while inferential statistics employed included Pearson Product Moment Correlation Coefficient, Chi-Square and t-test. Descriptive statistics were used to summarise and describe study data while inferential statistics were used to deduce relationship patterns between and among study constructs. This is in line with the suggestion by Malhotra (2007) the statistical tools used were indeed appropriate for procedures described above. Statistical analysis was performed using the Statistical package for the Social Sciences (SPSS) version 21.0 for windows.

To verify the appropriateness of data sufficiency in conducting the study, the principle component analysis (PCA) was applied, as the sample was considered to be representative of the population. In order to check if the data was appropriate for such an analysis, the Kayser-Meyer-Olkin (KMO) measure of sampling adequacy (refer to table 4.1) was applied, which showed a value of 0.825. Field (2009b), referring to Hutcheson & Sofroniou (1999), states that values above 0.9 are superb; values between 0.8 and 0.9 are great; values between 0.7 and 0.8 are good, and values between 0.5 and 0.7 are mediocre. Kaiser (1974) recommended a minimum of 0.5.
Bartlett’s Test of Sphericity was also conducted in order to test if there were any relationships at all in the correlation matrix or if the matrix was an identity matrix (in an identity matrix all correlation coefficients would be zero). For the data at hand, Bartlett’s Test gave a highly significant result, which was below 0.001. In conclusion, the data was significantly appropriate for this kind of statistical analysis.

Table 4.1: Test of Sampling adequacy and Sphericity of data

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>.825</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>31851.973</td>
</tr>
<tr>
<td>Df</td>
<td>2686</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

The collected data was also tested using Kolmogorov – Smirnov (K-S) statistic to ascertain normality and uniformity in data in distribution. K-S is a non-parametric test that compares the cumulative distribution function for variables within a specified distribution (Malhotra, 2007). The overall outcome of K-S test using normalized Z –statistics for all the study variables obtained at the level of significance of (.000) (2-tailed) indicated that the collected data was normally and uniformly distributed. Such normal and uniform distribution made it safe for the researcher to use statistical analysis models and procedures that rely on normality of the distribution of data like correlation coefficients and non-parametric statistics.

4.1.1 Response Rate

The study targeted 231 respondents being 210 students, 7 head teachers and 14 teachers drawn from girls’ schools and mixed schools. Out of the sampled respondents, 169 students, 7 head
teachers and 12 teachers responded to data collection instruments and returned them to the researcher totaling to 188 members of the accessible sample for the study. This gave the study a response rate of 81.39%. According to Sekaran (2010), a response rate 70% and above is excellent for generalization of findings from a sample onto the entire population from which the sample was drawn. With regard to this study, the response rate was excellent for generalizability of findings.

4.2 Demographic Characteristics of Respondents
The study sought to determine the demographic characteristics of respondents with a view to determine whether they had any influence on respondents in their ability to understand and respond to the items in the data collection instruments as well as to the study constructs. Of interest to the study were age of the students, gender of the students, education level of Home Science teachers, their teaching subjects other than Home Science, teaching experience and any other position of responsibility held in school. With regard to Head teachers, the study sought to find out their gender and education level. Findings are presented in the following section.

4.2.1 Demographic Characteristics of Students
Respondents from the students’ segment were asked to indicate their age range and findings presented in figure 4.1.
Results in figure 4.1 reveal that 63.91% of the respondents were aged between 16 and 20 years while 24.85% were over the age of 20 years. Findings also revealed that 11.24% of the respondents were aged between 10 and 15 years. This is a clear description of the average age of students who have completed secondary schools in Kenya where most of them are normally within the age range of 18 to 21 years. This finding also shows that the student sample was composed of a fairly large number of relatively mature students that would understand and respond to the study questionnaire.
Findings of the study reveal that 72.19% of the students who took part in the study as respondents were female while 27.81% were male. This is a clear indication that more female students are taking Home Science subject in secondary schools as compared to their male counterparts.

**4.2.2 Demographic Characteristics of Head Teachers**

The study sought to find out gender of Head Teachers and findings presented in figure 4.2.
From the study findings in figure 4.3, it was found that 71.43% of the respondents from head teachers’ category were female while 28.57% were male. This is characteristic of the fact that majority of the respondents from the study sample were from Girls’ schools, which are mostly headed by female head teachers. The reason for selecting more girls’ schools to take part in the study was that Home Science subject is offered in nearly all Girls’ schools within the study area. Respondents were also asked to indicate their highest academic qualifications and findings presented in table 4.2.

<table>
<thead>
<tr>
<th>Academic Level</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Degree</td>
<td>4</td>
<td>57.14</td>
</tr>
<tr>
<td>Masters</td>
<td>3</td>
<td>42.86</td>
</tr>
<tr>
<td>Doctorate</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Figure 4.2: Gender of Head Teachers**

![Figure 4.2: Gender of Head Teachers](image)
Results in table 4.2 reveal that 57.14% of the respondents had Bachelor’s degrees while 42.86% had Masters degrees. There was no respondent in this category with doctorate qualifications. Findings suggest that the respondents in the study were well educated individuals with vast knowledge and experience in the management of curriculum implementation in their respective schools. Such qualifications made it possible for the head teachers to understand the items in the interview data collection tools and to respond appropriately.

4.2.3 Demographic Characteristics of Home Science Teachers

Teachers were asked to state their highest level of education and findings presented in figure 4.3.

![Bar Chart]

**Figure 4.3: Academic level of Home Science Teachers**

Study findings in figure 4.4 reveal that 64.29% of the respondents from the category of Home Science Teachers had Bachelors’ degree qualifications while 28.57% had masters. The study also found that 7.14% of the respondents were diploma holders. This shows that a large majority of the respondents for the study were well educated and qualified individuals who understood
curriculum implementation and preparation of students for the job market after secondary education.

Respondents were also asked to indicate their teaching subjects and findings indicated that 58.67% of the respondents taught Home Science and Biology while 41.33% taught just Home Science. This is an indication that the study sampled the relevant teachers who had practical knowledge and experience relating to curriculum implementation for the Home Science subject. Respondents were asked to state their teaching experience and findings presented in table 4.3.

Table 4.3: Teaching experience of Home Science Teachers

<table>
<thead>
<tr>
<th>Academic Level</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 years</td>
<td>2</td>
<td>14.29</td>
</tr>
<tr>
<td>5 – 10 years</td>
<td>8</td>
<td>57.14</td>
</tr>
<tr>
<td>Over 10 years</td>
<td>4</td>
<td>28.57</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Findings in table 4.3 reveal that 57.14% of the respondents had a teaching experience of 5 to 10 years while 28.57% had a teaching experience of over 10 years. The study also found that 14.29% of the respondents had a teaching experience that was less than 5 years. The findings suggest that a large majority of the respondents of the study were highly experienced individuals with immense knowledge in teaching methodology, syllabus coverage and curriculum implementation. This was key in preparing students for the industry after secondary education.
Respondents were also asked to indicate their position of responsibility in school and findings presented in figure 4.4.

![Bar chart showing positions in school](image)

**Figure 4.4: Position in School**

Findings in figure 4.4 show that 42.86% of the respondents were Heads of departments while 35.71% were senior teachers. Further still, 21.43% of the respondents were deputy head teachers. This is a clear indication that respondents in this category were individuals who held positions of responsibility in their respective schools and were influential individuals with regard to the extent of implementation of Home Science curriculum in their respective schools.

**4.3 Sensitization on the problem of unemployment among the youths**

The first objective of the study sought to create sensitization on the problem of unemployment among the youth in Kakamega County. In order to do this, the following research question was formulated to guide the study;

What is the extent of sensitization on the problem of unemployment among the youth in Kakamega County?
Study constructs relating to extent of sensitization on unemployment among the youth as obtained from students and teachers questionnaires were subjected to descriptive statistics and findings presented in table 4.4.

### Table 4.4: Nature of unemployment

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>169</td>
<td>1.2396</td>
<td>.31993</td>
<td>.041833</td>
</tr>
<tr>
<td>Head Teachers</td>
<td>7</td>
<td>1.2454</td>
<td>.32415</td>
<td>.040453</td>
</tr>
<tr>
<td>Teachers</td>
<td>14</td>
<td>1.2645</td>
<td>.31027</td>
<td>.039941</td>
</tr>
</tbody>
</table>

With regard to the nature of unemployment, all the three categories of respondents agreed that unemployment levels were significantly high among secondary school leavers. This is revealed by the relatively small differences in their respective mean responses (1.2396, 1.2454 and 1.2645) for students, head teachers and teachers respectively to the study items relating to nature of unemployment in Kakamega County. This shows that the extent of awareness of the problem of unemployment among the youth in Kakamega County is significant.

Based on the small scores in the mean and standard deviation as regards the responses on sensitization about unemployment in Kakamega County, the study sought to investigate whether the responses were statistically significant. A two sample independent t-test for equality of means was computed for responses on nature of unemployment and findings presented in table 4.5.
Table 4.5: usefulness of Home science skills.

<table>
<thead>
<tr>
<th>Usefulness of skills</th>
<th>Frequency</th>
<th>Percentage(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small scale retail business</td>
<td>16</td>
<td>9.47</td>
</tr>
<tr>
<td>Hotel Business</td>
<td>27</td>
<td>15.98</td>
</tr>
<tr>
<td>Tailoring Business</td>
<td>14</td>
<td>8.28</td>
</tr>
<tr>
<td>Other forms of Entrepreneurship</td>
<td>28</td>
<td>16.57</td>
</tr>
<tr>
<td>No benefit.</td>
<td>84</td>
<td>69.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>169</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Findings in table 4.6 reveal that 69.7% of respondents did not find their Home Science skills useful after school. It was also established based on study findings that 16.57% of respondents used their Home Science skills in other forms of entrepreneurship while 15.98% used their home science skills in the hotel industry either as employees or small scales proprietors. It was further revealed that 9.47% of respondents used their skills in small scale businesses while 8.28% used their Home Science Skills in tailoring. This shows that a large majority of respondents did not find their Home Science skills useful after school.

Table 4.6: Extent of engagement in the informal sector

<table>
<thead>
<tr>
<th></th>
<th>State the ways in which the skills acquired have been of economic value to you.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square df</td>
<td>19.423</td>
</tr>
<tr>
<td>Asymp. Sig</td>
<td>2.051</td>
</tr>
</tbody>
</table>
Findings in table 4.6 show that students did not significantly put to use skills acquired in Home Science subject at secondary school level ($x^2=19.423$; df=2; $P>0.05$). This implies that the curriculum and scope of Home Science subject as advanced now does not adequately prepare students for the job market. This is seen in the $P$ value being greater than 0.05 signifying that Home Science subject does not significantly prepare secondary school leavers for the job market.

To determine the overall unemployment levels among secondary school leavers, study data relating to unemployment was subjected to Chi-Square and findings presented in table 4.7.

**Table 4.7: Chi-Square Results for Extent of Sensitization on the Problem of unemployment**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Df</th>
<th>Asympt.Sig. (2 -sided)</th>
<th>Exact Sig. (2 -sided)</th>
<th>Exact Sig. (1 -sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>-19.098a</td>
<td>1</td>
<td>.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction b</td>
<td>-6.399</td>
<td>1</td>
<td>.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>-19.101</td>
<td>1</td>
<td>.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher’s Exact Test</td>
<td></td>
<td></td>
<td>.004</td>
<td>.004</td>
<td>.004</td>
</tr>
<tr>
<td>Linear by Linear</td>
<td></td>
<td></td>
<td>.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Association</td>
<td></td>
<td></td>
<td>.004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of valid cases</td>
<td>188</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

0 cells (.0%) have expected count less than 4. The minimum expected count is 49.59.

Findings in table 4.7 reveal a negative score for extent of sensitization on unemployment trends in Kakamega County ($X^2= -19.098$; df=1; $P<0.05$). This implies that measures had not been taken to create sensitization on the prevalence of unemployment in Kakamega County was significantly high.

Findings of this study were compared with findings from previous studies relating to the relationship between vocational subjects and unemployment. This is because vocational subjects...
were intended to create employment and self-reliance among the students. Self-employment provides income, self-reliance and a dynamic path for growth and the development of human capital (World Bank, 2008). In addition, young entrepreneurs may be more responsive to new economic opportunities and trends. Entrepreneurship can unleash the economic potential of young people and be a source of new jobs and growth, while improving their economic independence.

Young people can no longer expect to find job-for-life careers but rather portfolio careers (contract employment, freelancing, periods of self-employment, etc.) Entrepreneurial experience and/or education help youth develop new skills that can be applied to other challenges in life. Non-cognitive skills, such as opportunity recognition, innovation, critical thinking, resilience, decision making, teamwork, and leadership will benefit all youth whether or not they intend to become or continue as entrepreneurs.

Both Vocational and Vocationalisation of all education will involve skills development. Where vocationalization and skills development is intended to build the capability to act in a variety of real life situations, the vocational education gives skills for a specific vocation under well defined limitations. Without the general skills development, the specific skill cannot help him to survive in the competition that is life. Therefore vocational education can only be useful on a base of general skills development. In the view of Swartland (2008), Entrepreneurship education aims to stimulate creativity in students, enable them to identify opportunities for innovation and motivate them to transform the ideas into practical and targeted activities whether in a social, cultural or economic context. Kenyan government’s commitment to the vocationalisation of the secondary school curriculum dates back to the recommendations made by the 1976 National
Committee on Educational Objectives and Policies (NCEOP) and the sessional paper that clarified them (MOE 1978). Among other recommendations, this Committee called for adjustments in the education system in order for it effectively meet basic needs of the learners as well as promote income earning opportunities for school leavers. This would also change the attitudes of learners in favor of vocational skills that would enhance self-confidence and creativity related to self-employment. The recommendations of the NCEOP informed the basis for the restructuring of Kenya’s education system from the British 7-4-2-3 system to the American 8-4-4 system following the Report of the Presidential Working Party that was tasked with the responsibility of making recommendations regarding the establishment of the Second University in Kenya (MOE, 1984).

4.4 Classroom practice in Home science
The second objective of the study sought to find out the effectiveness of the methods used to teach Home Science in secondary schools. The study asked Home Science teachers to state the methods that they used in teaching Home Science subject in secondary schools and findings analyzed using descriptive statistics and presented in table 4.8.

<table>
<thead>
<tr>
<th>Teaching method</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture method</td>
<td>9</td>
<td>64.29</td>
</tr>
<tr>
<td>Discussions</td>
<td>3</td>
<td>21.43</td>
</tr>
<tr>
<td>Practical method</td>
<td>5</td>
<td>35.71</td>
</tr>
<tr>
<td>Group work</td>
<td>2</td>
<td>14.29</td>
</tr>
<tr>
<td>Project</td>
<td>1</td>
<td>7.14</td>
</tr>
<tr>
<td>Filed work</td>
<td>2</td>
<td>12.29</td>
</tr>
</tbody>
</table>
Findings in table 4.8 reveal that the lecture method was the most widely used teaching method for Home Science subject with 64.29% preference followed by practical method with 35.71% preference and then discussion method at 21.43%. It was also found that 14.29% preference for teaching methods went to group work, 12.29% to field work while project method was the least preferred teaching method.

It was found that all the head teachers interviewed indicated that they had an HOD for technical and applied departments. The study also found that 89.64% of the head teachers were of the view that their school used community resources in teaching and resources used mainly included local tailoring shops and hotels. Findings of the study also revealed that 72.41% of the head teachers were of the view that they had positive attitude towards home science teachers’ delivery of curriculum. It was also found that 91.05% of the respondents from the head teachers’ category indicated that their schools influence students in choosing home science subject.

With regard to what can be done to avert the short comings in implementation of home science curriculum respondents suggested that parents take the leading role in buying the necessary material to facilitate effective implementation of the various teaching methods. It is also suggested that sponsors come up and donate some equipment that would support effective implementation of the curriculum and by extension the teaching methods.

Findings of this study are discussed in relation to empirical findings from previous studies on teaching methods for vocational subjects and their effectiveness. A study by Gerlach and Ely (1971) found that an effective teacher has a multitude of techniques at his disposal and must be most efficient in teaching the learner to the desired terminal behavior. Hatcher (1963) suggested that in determining what technique to select, the teacher will need to understand what values a
particular teaching method possesses, how it operates and where it can be used to improve learning. The choice of a teaching method depends on the content and materials available.

The Kenya National Committee on Educational objectives and Policies (Gachathi 1976) noted that “to make education relevant to the day-to-day problems, the teaching method has to aim at developing methods and the ability to gather data by observation of the environment.” This implies that the teaching method should expose the learners to the environment.

Sigot (1986) has also remarked that there is an apparent need for less emphasis on teacher-centered teaching skills such as the traditional demonstration and emphasis on student-centered activities such as problem solving, role playing, case studies and the use of facilities available in the community. This implies that emphasis needs to be placed on the skills of enquiry, on the methods of discovery, self directed learning and initiative. That is the student should be an active participant rather than the passive observer in the Home Science classes. However, Kiviu (1985) found out that the Home Science teachers spent more than half of their class time (62%) on explanations, narrations and description, all of which are teacher initiated talk, an indication of a teacher centered-approach to teaching and learning.

This is similar to findings of studies done by Flanders (1970) and Perrot (1977). Kiviu,(1985), further pointed out that discussions in groups, student projects and reports provide opportunities for students to learn materials given to them and allow interaction between teachers and learners and among learners themselves. This involvement is very significant to students’ learning. Teaching methods differ in efficiency and appropriateness for different objectives and subject content. Teachers therefore should learn to make decisions carefully as they chose content and
objectives. Teaching methods chosen should be geared to increasing interest, participation and teaching effectiveness in the class work.

Field trips can inspire students to be excited more about the learning process. Visiting a new place, meeting new people, and seeing and experiencing the things they have learnt about in the classroom provide ways that the students can be stimulated by the environment. Field trips provide unique opportunities for learning that are not available in the four walls of a classroom. They allow students to have practical experience which clearly illustrates and enhances knowledge taught in the curriculum. Many students do not have the opportunity to go to new places, let alone see what they are learning. Attending a field trip can offer a new and welcomed experience for students who would not have them (Donohue, 2011).

4.5 Competencies developed through Home Science that are related to employability

The third objective of the study sought to find out the competencies developed through learning Home Science that are related to employability. This objective sought to investigate if there was a relationship between skills and competencies developed by Home Science students and their ability to gain employment after school. Study constructs relating to skills and competencies acquired through Home Science and those relating to employability were subjected to Pearson Product Moment Correlation Coefficient and findings presented in table 4.9.
### Table 4.9: Correlation Coefficient for the Relationship between Home Science Skills and Employability

<table>
<thead>
<tr>
<th>Home Science Skills</th>
<th>Employability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.661*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.039</td>
</tr>
<tr>
<td>N</td>
<td>188</td>
</tr>
</tbody>
</table>

**Correlation is significant at 0.0 level (2-tailed)**
*Correlation significant at 0.01 level (2-tailed)

Study findings in table 4.9 reveal a statistically insignificant positive relationship between Home Science skills and employability among the youth in Kakamega County (r=0.661; P<0.05). This implies that skills and competencies acquired through learning Home Science assist students to gain employment and improve their prospects of employment after school. This is in line with the objective of vocational training which is to equip young men and women with the technical and professional skills needed for socio-economic development of the country. The emphasis is on training people for self-employment.

To establish the various skills and competencies acquired through Home Science, study data was analyzed using regression and findings presented in table 4.10.
Table 4.10: Regression Results for the Competencies Acquired through learning Home Science

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficients</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.042</td>
<td>2.606</td>
<td>0.011</td>
</tr>
<tr>
<td>Creative Thinking</td>
<td>0.095</td>
<td>0.563</td>
<td>0.001*</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>0.347</td>
<td>3.276</td>
<td>0.002*</td>
</tr>
<tr>
<td>Planning and Organizing</td>
<td>0.491</td>
<td>2.580</td>
<td>0.012*</td>
</tr>
<tr>
<td>Interpersonal Skills</td>
<td>0.350</td>
<td>3.292</td>
<td>0.002*</td>
</tr>
<tr>
<td>Willingness to take Risk</td>
<td>0.381</td>
<td>3.337</td>
<td>0.014</td>
</tr>
</tbody>
</table>

Goodness of Fit:

- $R^2$ = 0.684
- Adjusted $R^2$ = 0.622
- F-value = 4.567

Findings in table 4.10 shows the regression analysis for the competencies acquired through learning Home Science in Secondary Schools where constructs variables involved were creative thinking, problem solving, planning and organizing, interpersonal skills and willingness to take risk. The result showed that, calculated t-statistics ($t = 0.563, 3.276, 2.580, 3.292$ and 3.337) for parameters creative thinking, problem solving, planning and organizing, interpersonal skills and willingness to take risk respectively were greater than tabulated t-statistics at 95% confidence interval. This finding reveals that creative thinking, problem solving, planning and organizing, interpersonal skills and willingness to take risk were the vital competencies acquired through learning Home Science in Secondary Schools in Kakamega County. The coefficient of determination ($R^2$) was 0.684 showing that creative thinking, problem solving, planning and organizing, interpersonal skills and willingness to take risk accounted for 68.4% of variation in skills and competencies acquiring though offering Home Science in Secondary Schools in Kakamega County. The remaining 31.6% unexplained variable was largely due to variation in other variables outside the regression model which are otherwise included in the stochastic error.
term. The overall regression model was statistically significant in terms of its overall goodness of fit (f = 4.567, P < 0.05).

Study findings were compared to findings from previous empirical studies on the relationship between vocational subjects and employment. A study by Nsiah-Gyabaah (2009) established that Technical and Vocational Education Training (TVET) is concerned with the preparation of learners for employment, through the provision of knowledge, skills and attitudes desirable in the world of work, its contribution to industrial and national development cannot be overemphasized. TVET remains the country's hope of reducing the high level of widespread poverty and deprivation because whether on the farm, the clinic, in the office, at sea, in the mines, in the forest, at the workshop, or the dressmakers, among others, the science or technology, which is applied depends on a workforce of skilled, competent technologists, technicians and craftsmen. The most important role of TVET is enhancing economical, social and industrial development. It is therefore an essential approach in preparing human resources within the educational economical system. TVET by itself does not create jobs, but is beneficial when it is associated with the actual needs of the labour market. This is the reason TVET programmes in Ghana should match current and future labour market needs. A standard TVET is expected to mobilize resources needed to face the present problems and future challenges. Due to its concentration on the actual needs of labour market and focus on the output, it designs flexible programmes that serve the needs of production and service sectors and design practices and learning experiences that best serve job requirements (Johanson and Adams, 2004).

In today’s knowledge driven and competitive global economy, Technical and Vocational Education is a fundamental element in the development equation because it allows individuals and societies to unlock their potentials, expand their horizons and adapt to changes in the dynamic world. TVET provides a mix of knowledge and career focused, hands-on, and skills
based education that is needed to run the productive sectors of the economy and build the nation. Quality technical and vocational education and training (TVET) helps develop the individual’s knowledge of science and technology in a broad occupational area requiring technical and professional competencies and specific occupational skills. The broad aims for vocationalization of education as cited by government policy are captured as: the increasing training opportunities for the increasing numbers of school-leavers win a way that prepares them for self-reliance and self-employment through the promotion of practical skills and attitudes; promoting the kind of education and training that seeks to enhance Kenya’s overall economic development and in specific sectors such as Home Science, Agriculture, Industry and Commerce; Development of vocational entrepreneurial skills as the basis for further individual development; Improving and increasing number of skilled artisans, technicians and technologists for the employment sector; Exposing learners to scientific and technological trends, skills and ideas and promoting lifelong skills that enable learners to adjust to their work and future job market through the inculcation of competencies that promote creativity, communication, cooperation, innovativeness and problem-solving abilities; and Preparation of learners for further training in tertiary institutions as well as universities.

Amusan (2004) agrees that vocationalisation of education will provide opportunities for students to assess their attitude, aptitude and skills relating to those necessary for developing and running business. It aims at equipping students with peculiar qualities, skills and administrative acumen for immediate and future needs. Onifade (2004) views entrepreneurship as an act of floating a business through investment of capital and taking on the risks that may be associated with the investment.
According to Sasaki (2006), youth entrepreneurship was shown to be a useful way to promote self-employment for young people. Important work in municipalities in African cities has demonstrated that employment for young people can be created by actively promoting education and particularly by vocationalising education.

4.6 Challenges affecting the teaching and learning of Home Science in Secondary Schools
The fourth objective of the study sought to investigate the challenges affecting the teaching and learning of Home Science in Secondary Schools in Kakamega County. Study data relating to challenges affecting teaching and learning Home Science in Secondary Schools was subjected to Regression analysis and findings presented in table 4.11.

Table 4.11: Regression Results showing the challenges affecting Teaching and Learning Home Science in Secondary School

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficients</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.439</td>
<td>2.606</td>
<td>0.001*</td>
</tr>
<tr>
<td>Inadequate Resources</td>
<td>0.455</td>
<td>0.508</td>
<td>0.002*</td>
</tr>
<tr>
<td>Negative Perception</td>
<td>0.365</td>
<td>3.784</td>
<td>0.001*</td>
</tr>
<tr>
<td>High cost</td>
<td>-0.398</td>
<td>-2.781</td>
<td>0.001*</td>
</tr>
<tr>
<td>Few Teachers</td>
<td>0.374</td>
<td>3.441</td>
<td>0.002*</td>
</tr>
<tr>
<td>Lack of Equipment</td>
<td>0.366</td>
<td>3.691</td>
<td>0.014</td>
</tr>
</tbody>
</table>

Goodness of Fit:

R²                     0.634
Adjusted R²             0.603
F-value                 4.391
Findings in table 4.11 show the regression analysis for challenges affecting teaching and learning Home Science in the Secondary School Curriculum where constructs involved were inadequate resources, negative perception by students, high cost, inadequate instructional personnel and lack of equipment. The result showed that, calculated t-statistics ($t = 0.508, 3.784, -2.781, 3.441, 3.691$ and $3.951$) for parameters inadequate resources, negative perception by students, high cost, inadequate instructional personnel and lack of equipment respectively, were greater than tabulated t-statistics at 0.05 level of significance. This finding reveals that inadequate resources, negative perception by students, high cost, inadequate instructional personnel and lack of equipment were the challenges affecting teaching and learning Home Science in Secondary Schools in Kakamega County. The coefficient of determination ($R^2$) was 0.634 indicating that inadequate resources, negative perception by students, high cost, inadequate instructional personnel and lack of equipment account for 63.4% of variation in the challenges for that affect teaching and learning Home Science in Secondary Schools in Kakamega County. The remaining 36.6% unexplained variable was largely due to variation in other variables outside the regression model which are otherwise included in the stochastic error term. The overall regression model was statistically significant in terms of its overall goodness of fit ($f = 4.391, P < 0.05$).

Study findings are discussed in line with the findings from previous studies on challenges that affect teaching and learning vocational subjects in Secondary Schools. A study by Nyankov (1996) established that the following challenges affected teaching and learning vocational subjects in Ghana; Poor quality in the delivery of TVET programmes; High cost of training; Training not suited to actual socio-economic conditions; Disregard of the needs of the informal sector; Disregard of the labour market and high unemployment rate among graduates. In an attempt to address these challenges, Reddan and Harrison (2010) argued that TVET institutions
need to restructure their programmes to be responsive to the needs of the job market, especially
the industry. To achieve this goal, TVET curricula must focus on outcomes in terms of the skills,
knowledge and attitudes required industry. That is, TVET provision should be responsive to the
demands of industry.

King and McGrath (2004) argued that with TVET being more diverse because of the changes in
the labour market, it should be able to integrate the youth into the working world. Given the
prevailing economic trend, UNESCO (2004) identified the two major objectives of TVET as the
urgent need to train the workforce for self-employment and the necessity to raise the productivity
of the informal sector. They point out that lack of resources have led to cuts in the volume of
training provided in public institutions. These cuts are a hindrance to pursuing the critical
objectives of providing training and raising production. Considering the expensive nature of
TVET as a form of education, it is imperative that an expanded system with necessary and
adequate facilities and equipment will lead to the effectiveness of the system.

Related studies carried out by Islam and Mia (2007) in Bangladesh revealed that both formal and
non-formal TVET lacked an effective linkage between training and the world of work. It further
noted that because of its lack of coherent mode, practical skills training which does not produce
the requisite skills for the job market. Additionally, the trainees also lacked training experience,
initiative and motivation to discharge their duties effectively.

Abban and Quarshie (1996) pointed out that the paradigm shift towards practical skills training
with TVET in Africa is increasingly being reshaped to make it more attractive, efficient and
effective. One of the most important features of TVET, as recognized by African governments, is
its orientation towards the world of work with the curriculum emphasizing the acquisition of
employable skills. African Union (2007) report also stressed the current vision of African
countries in developing a new strategy to revitalize TVET in Africa. The expectation is that
TVET will promote skills acquisition through competency-based training. If this vision should
materialise, it will require proficiency testing for employment in order to promote sustainable
livelihoods and responsible citizenship. Another study by Conversely, Carnoy (1993) concluded
that, despite the advantages of imparting job-related skills and the high level of unemployment
amongst those with general education, the recognition and preference for general education by
the youth in the Sub-Saharan Africa is high. The reason for this is that personnel in
administrative and leadership roles are generally chosen from people with a general education
background. Therefore, talking about the importance of TVET, without any deliberate action to
follow up the rhetoric, will not change its poor image and low status.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction
This chapter presents a summary of the study findings, conclusions and recommendation for the study. The study sought to investigate the influence of classroom practice of Home Science on employability among the youth in Kakamega County. The study employed a descriptive survey design in which 188 respondents participated in providing information regarding the study constructs. Both purposive sampling and simple random sampling techniques were used in selecting the respondents.

5.1 Summary of the Study Findings
Key findings from each of the four objectives of the study have been summarized and arranged in the order in which they occur in the study.

5.1.1 Sensitization on the problem of unemployment among the youths
The first objective of the study sought to create sensitization on the problem of unemployment among the youth in Kakamega County. Study constructs relating to extent of sensitization on unemployment among the youth as obtained from students and teachers questionnaires were subjected to descriptive statistics. With regard to the nature of unemployment, all the three categories of respondents agreed that unemployment levels were significantly high among secondary school leavers. This is revealed by the relatively small differences in their respective mean responses (1.2396, 1.2454 and 1.2645) for students, Head teachers and teachers respectively to the study items relating to nature of unemployment in Kakamega County.

Based on the small scores in the mean and standard deviation as regards the responses on nature of unemployment in Kakamega County, the study sought to investigate whether the responses
were statistically significant. A two sample independent t-test for equality of means was computed for responses on nature of unemployment. Study findings in table indicate that the mean differences in responses about nature and extent of unemployment among the three categories of respondents were not statistically significant ($t=1.044$, $P > 0.05$, $df=2.36$). This is further shown where the critical value of $t$ (1.68) is greater than the calculated value of $t$ (1.044). This implies that the differences in opinion of respondents regarding extent of unemployment were largely uniform and in agreement.

5.1.2 Methods used in teaching Home science
The second objective of the study sought to find out the effectiveness of the methods used to teach Home Science in Secondary Schools. The study asked Home Science teachers to state the methods that they used in teaching Home science Subject in Secondary Schools.

Findings reveal that lecture method was the most widely used teaching method for Home Science with 64.29% preference followed by practical methods with 35.71% preference and then discussion method at 21.43%. It was also found that 14.29% preference for teaching methods went to group work, 12.29% to field work while projects were the least preferred teaching methods.

It was found that all the head teachers interviewed indicated that they had a Head of Department (HOD) for technical and applied departments. The study also found that 89.64% of the head teachers were of the view that their schools used community resources in teaching and resources used mainly included local tailoring shops and hotels. Findings of the study also revealed that 72.41% of the head teachers were of the view that they had positive attitude towards home
science teachers’ delivery of curriculum. It was also found that 91.05% of the respondents from the head teachers’ category indicated that their schools influenced students in choosing Home Science subject. With regard to what can be done to avert the shortcomings in implementation of Home Science curriculum respondents suggested that parents took the leading role in buying the necessary material to facilitate effective implementation of the various teaching methods. It is also suggested that sponsors came up and donated some equipment that would support effective implementation of the curriculum and by extension the teaching methods.

5.1.3 Competencies developed through Home Science that are related to employability
The third objective of the study sought to find out the competencies developed through learning Home Science that are related to employability. Study constructs relating to skills and competencies acquired through Home Science and those relating to employability were subjected to Pearson Product Moment Correlation Coefficient. Study findings revealed a statistically insignificant positive relationship between Home Science skills and employability among the youth in Kakamega County (r=0.661; P<0.05). This implied that skills and competencies acquired through learning Home Science assist students to gain employment and improve their prospects of employment after school. To establish the various skills and competencies acquired through Home Science, study data was analyzed using regression.

Findings of the study showed that, calculated t-statistics (t =0.563, 3.276, 2.580, 3.292 and 3.337) for parameters creative thinking, problem solving, planning and organizing, interpersonal skills and willingness to take risk respectively were greater than tabulated t-statistics at 95% confidence interval. This finding reveals that creative thinking, problem solving, planning and organizing, interpersonal skills and willingness to take risk were the vital competencies acquired through learning Home Science in Secondary Schools in Kakamega County. The coefficient of determination (R²) was 0.684 showing that creative thinking, problem solving, planning and organizing, interpersonal skills and willingness to take risk accounted for 68.4% of variation in
skills and competencies acquiring though offering Home Science in Secondary Schools in Kakamega County. The remaining 31.6% unexplained variable was largely due to variation in other variables outside the regression model which are otherwise included in the stochastic error term. The overall regression model was statistically significant in terms of its overall goodness of fit (f = 4.567, P < 0.05).

5.1.4 Challenges affecting the teaching and learning of Home Science in Secondary Schools
The fourth objective of the study sought to investigate the challenges affecting the teaching and learning of Home Science in Secondary Schools in Kakamega County. Study data relating to challenges affecting teaching and learning Home Science in Secondary Schools was subjected to Regression analysis. Findings of the study showed that, calculated t-statistics (t = 0.508, 3.784, -2.781, 3.441, 3.691 and 3.951) for parameters inadequate resources, negative perception by students, high cost, inadequate instructional personnel and lack of equipment respectively, were greater than tabulated t-statistics at 0.05 level of significance. This finding reveals that inadequate resources, negative perception by students, high cost, inadequate instructional personnel and lack of equipment were the challenges affecting teaching and learning Home Science in Secondary Schools in Kakamega County. The coefficient of determination (R²) was 0.634 indicating that inadequate resources, negative perception by students, high cost, inadequate instructional personnel and lack of equipment account for 63.4% of variation in the challenges for that affect teaching and learning Home Science in Secondary Schools in Kakamega County. The remaining 36.6% unexplained variable was largely due to variation in other variables outside the regression model which are otherwise included in the stochastic error term. The overall regression model was statistically significant in terms of its overall goodness of fit (f = 4.391, P < 0.05).
5.2 Conclusions

Based on the study findings, the following recommendations are made:

The first objective of the study sought to create sensitization on the problem of unemployment among the youth in Kakamega County. With regard to the nature of unemployment, all the three categories of respondents agreed that unemployment levels were significantly high among secondary school leavers and there was need for more sensitization on the problem. Based on this finding, it is concluded that there is need to sensitize the youth on the trends in unemployment within Kakamega County.

The second objective of the study sought to find out the methods used to teach Home Science subject in Secondary Schools in Kakamega County. The study asked Home Science teachers to state the methods that they used in teaching Home Science subject in secondary schools. Findings reveal that class room lecture method was the most widely used teaching method for Home Science subject with 64.29% preference followed by practical method with 35.71% preference and then discussion method at 21.43%. It was also found that 14.29% preference for teaching methods went to group work, 12.29% to field work while use of projects was the least preferred teaching method. Based on the above finding, a conclusion is made that class room lecture method, practical method, discussion method, group work, field work and project methods were the preferred methods for teaching Home Science in Secondary Schools in Kakamega County.
The third objective of the study sought to find out the competencies developed through learning Home Science that are related to employability. Study findings revealed a statistically insignificant positive relationship between Home Science skills and employability among the youth in Kakamega County. Further still, it was found that creative thinking, problem solving, planning and organizing, interpersonal skills and willingness to take risk were the vital competencies acquired through learning Home Science in Secondary Schools in Kakamega County. Based on this finding, a conclusion is made that creative thinking, problem solving, planning and organizing, interpersonal skills and willingness to take risk were the competencies acquired through learning Home Science in Secondary Schools in Kakamega County.

The fourth objective of the study sought to investigate the challenges affecting the teaching and learning of Home Science in Secondary Schools in Kakamega County. Findings of the study revealed that inadequate resources, negative perception by students, high cost, inadequate instructional personnel and lack of equipment were the challenges affecting teaching and learning Home Science in Secondary Schools in Kakamega County. With respect to this finding it is concluded that inadequate resources, negative perception by students, high cost, inadequate instructional personnel and lack of equipment were the challenges affecting teaching and learning Home Science in Secondary Schools in Kakamega County.

5.3 Recommendations
A number of measures could enhance the quality and relevance of Home Science and other vocational education subjects in creating employment especially for the youthful school leavers. First, of great importance is regular upgrading of teachers’ skills as well as of the teaching resources available to them. In-servicing training for teachers and regular advice by school
inspectors should be intensified to enhance the ability of teachers, to introduce new knowledge and to improvise in the absence of adequate learning/teaching facilities as well as settle on high quality and effective teaching methods for Home Science and other vocational subjects intended to create employment for secondary school leavers.

On financing, it may be necessary to limit the teaching of some vocational courses to a few schools that have the required equipment to effectively deliver such training. Where possible, the local communities as well as the private sector need to do more with regard to supporting vocational education depending on their ability and areas of interest. A case can be made for retaining vocational education such as Home Science in secondary schools that have the relevant physical and human resources. This is because findings from the students’ questionnaire pointed to the fact that some students value vocational subjects for a variety of reasons including their potential in enhancing employment and higher education opportunities.

Considerable acceptance of vocational subjects by students and parents is likely to result if the taught subjects present real and visible long-term benefits. Parents are also likely to be embraced vocational courses if they are not required to shoulder the costs associated with introducing and sustaining these subjects. Gender stereotyping in preferences for courses by boys and girls is likely to be overcome if it can be shown that available career chances have the potency to benefit both genders and if in the case of girls, deliberate steps are taken to show examples of females who have succeeded in careers traditionally considered as a preserve for men. Parents, teachers and students have a collective duty of not discouraging any gender from enrolling for vocational courses.
The idea of reducing vocational courses to the elective category for student registering for national examinations has not motivated many students and parents to be keen on them. One way of developing interest among students for these subjects is by coming up with policies that make it compulsory for schools to offer a certain minimum of vocational subjects. Interest in vocational subjects is however likely to go up if the national government as well as county governments will generates reasonable employment opportunities for internship and training for Secondary School graduates.

Finally, the national examination system requires remodeling and modification to increase relevance and be supportive for the goals of vocationalization. In this regard, more practical knowledge needs to be tested as opposed to more theoretical aspects. Given the potential role of vocational education in economic growth, it would be appropriate to consider other criteria, apart from excellence in academic performance in determining whether graduates of vocational education make meaningful contribution towards employment creation for themselves and others in the communities where they live.

5.4 Suggestions for further research
This study sought to investigate the influence of classroom practice of Home Science on employability among the youth in Kakamega County. Based on the findings, conclusions and recommendations of this study, the following suggestions are made for further research;

It would be important to investigate the extent to which other vocational subjects offered in Secondary Schools contribute to employability of secondary school leavers in Kenya. This is because Home Science is just part of the wide range of vocational and technical subjects that
prepare scholars for the job market. Investigating the contribution of other vocational and technical subjects would generate more information on the general influence of vocationalization of curriculum on employment creation in Kenya.

Secondly, it is important to know the influence of student and teacher attitude on successful implementation of Home Science Curriculum in secondary schools in Kenya. This will create knowledge on what would be done to enhance full implementation of the curriculum for vocational subjects.

Finally, issues of funding and inadequacy of resources were found to influence uptake of Home Science subject in secondary schools. It would be important to investigate the influence of resource allocation on extent of implementation of Home Science curriculum in secondary schools in Kenya.
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APPENDIX I: STUDENTS’ QUESTIONNAIRE

Welcome and thank you for sparing time to fill this questionnaire. I am undertaking a master’s degree in Education at Kenyatta University. The purpose of this questionnaire is to find out the extent to which Home Science Skills taught at Secondary School level transform into employment.

Please do not write your name but you are requested to consider each question very seriously and give the information asked as honestly as possible.

Tick your response (✓) where appropriate

1. Age:
   - 10-15 years [ ]
   - 16-20 years [ ]
   - Over 20 years [ ]

2. Gender
   - Male [ ]
   - Female [ ]

SECTION B

In question 3 and 4, answer with Yes or No by ticking the appropriate response,

3. Was Home Science one of the subjects offered to you?
   - Yes [ ]
   - No [ ]

4. What motivated you to choose Home Science? Tick the appropriate
   (i) To improve on my mean score [ ]
   (ii) Choice by the school [ ]
   (iii) Influence by friends [ ]
   (iv) To acquire skills for starting a career [ ]

5. Which of the following Home Science Skills did you acquire during school:
(i) House Keeping  
(ii) Cookery  
(i) Interior decoration  
(ii) Fashion and Design  
(iii) Beauty therapy

6. Did you advance your education after school?
   Yes [ ]  
   No [ ]

7. If no state in which way have the skills acquired have been of an economic value to you.

Please tick appropriately against the items in the table below.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Do you find Home Science relevant to your post school life?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Have Home Science graduates easily found jobs in the job market</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Were you forced to take up Home Science subject by the school administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Is the knowledge acquired in Home Science adequate to enable you to establish a self-employment venture?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX II: QUESTIONNAIRE FOR HOME SCIENCE TEACHERS

SECTION A: Teacher’s Biographical Data

1. Highest academic qualification
   - Diploma [ ]
   - Graduate [ ]
   - Masters [ ]

2. Teaching subject(s)

3. Teaching experience (years)

4. What is your rank?
   - Head teacher [ ]
   - D/head teacher [ ]
   - Senior teacher [ ]
   - H.O.D [ ]
   - Assistant teacher [ ]
   - Any other

5. What is the average number of students in each of the classes you teach?

6. Which methods do you use to teach Home Science?

7. Why do you prefer the above mentioned method(s)

8) a. what challenges do you encounter in teaching Home Science?
    b. How do you overcome the challenges mentioned above?

9). what is the students’ attitude towards Home Science
10). Please give your most objective opinion on the following items by ticking the option that best represents your choice.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Do you find Home Science relevant to the future careers of students?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Have Home Science graduates easily found jobs in the job market?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Does the school force students to take up Home Science subject?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Is the knowledge acquired in Home Science adequate to enable students to establish a self-employment venture?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Does the school have adequate resources to implement Home Science curriculum?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Do students consistently excel in Home Science subject in your school?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thank you.
APPENDIX III: INTERVIEW SCHEDULE FOR THE HEAD TEACHERS

SECTION A: Head teacher’s biographical data.

1. Gender Male [ ] Female [ ]

2. What is your highest academic qualification?

SECTION B

3. What subject(s) do you teach?

4. Does your school have a Head of Department for Technical and Applied department?

5. What is his/her subject area(s)

6. Does your school use community resources in teaching? If so, identify the kinds of the above resources that the learners get exposed to.

7. Does the school influence students’ choice of subjects?

8. What is your attitude towards teachers’ delivery of Home Science curriculum?

9. What role has Home Science played in school activities?

10. What do you consider as the main shortcomings of having Home Science on the curriculum?

11. Suggest possible solutions to the above shortcomings.

Thank you.
# APPENDIX IV: TEST FOR RESEARCH DATA CHARACTERISTICS

## Table A1: The Kolmogorov Smirnov test for Normality and Uniformity in data distribution

<table>
<thead>
<tr>
<th>Two-Sample Kolmogorov-Smirnov Test</th>
<th>Home Science Teaching Methods category</th>
<th>Youth Unemployment Category</th>
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<tbody>
<tr>
<td>N</td>
<td>188</td>
<td>188</td>
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<tr>
<td>Normal Parameters (a,b)</td>
<td>Mean</td>
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<tr>
<td></td>
<td>Std. Deviation</td>
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<tr>
<td>Most Extreme Differences</td>
<td>Absolute</td>
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<tr>
<td></td>
<td>Positive</td>
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<tr>
<td></td>
<td>Negative</td>
<td>-.009</td>
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<tr>
<td>Kolmogorov-Smirnov Z</td>
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<td>4.403</td>
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<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Test distribution is Normal.
b. Calculated from data.

<table>
<thead>
<tr>
<th>Two-Sample Kolmogorov-Smirnov Test</th>
<th>Home Science Teaching Methods category</th>
<th>Youth Unemployment Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>188</td>
<td>188</td>
</tr>
<tr>
<td>Uniform Parameters (a,b)</td>
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<td></td>
<td>Std. Deviation</td>
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<td>Most Extreme Differences</td>
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<td></td>
<td>Positive</td>
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<td></td>
<td>Negative</td>
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<tr>
<td>Kolmogorov-Smirnov Z</td>
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<td>3.431</td>
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<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
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</table>

a. Test distribution is Uniform.
b. Calculated from data.

## Consistency of Statistics

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>N of Items</th>
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