

**CONSTRAINTS AFFECTING CURRICULUM IMPLEMENTATION IN ADULT
BASIC EDUCATION AND TRAINING (ABET) IN MACHAKOS COUNTY, KENYA**

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**A THESIS SUBMITTED TO THE INSTITUTE OF POSTGRADUATE STUDIES
AND RESEARCH IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR
THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY IN EDUCATION
(CURRICULUM & INSTRUCTION) OF KABARAK UNIVERSITY**

KABARAK UNIVERSITY

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DECLARATION

I declare that this Thesis is my original work and has not been presented for the award of a degree in any other University.

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Date.....

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GDE/M/0955/9/10

RECOMMENDATION

To the Institute of Postgraduate Studies:-

The Thesis entitled “Constraints Affecting Curriculum Implementation in Adult Basic Education and Training (ABET) in Machakos County” and written by Edward Katue Nzinga is presented to the Institute of Postgraduate Studies of Kabarak University. We have reviewed the thesis and recommend it for acceptance in partial fulfillment of the requirement for the degree of Doctor of Philosophy in Education (Curriculum & Instruction)

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DEDICATION

This research is dedicated to my dear wife and friend, Damaris Mwende, and my beloved daughter Eunice Mumo and son EvansMwendwa without whose emotional, psychological and physical support, it would not have been possible.

ABSTRACT

A review of all of the available evaluation studies of adult literacy programs in Third World settings revealed that poor program design and implementation are the causes of inefficiency. Adult education in Machakos County is bedeviled by inadequate teaching staff, funds, facilities; and unskilled part-time teachers among others. This raises a lot of concern since these challenges pose a direct threat to Curriculum implementation in the County. The purpose of the study was to explore constraints affecting curriculum implementation in adult basic education and training (ABET) in Machakos County. Objectives were to: determine perceptual constraints of adult learners on the implementation of adult basic education; establish perceptual constraints of education managers on their understanding of their role in adult education; explore methodological constraints of teaching adult basic education in the implementation of the adult basic education and identify problems facing adult education officers in monitoring and supervision of adult education programs. Research findings will assist the proper implementation of adult learning programs while Researchers will be assisted to identify the research gaps in the field of curriculum implementation in adult education. The study used descriptive survey research design and was based on a Theoretical framework embracing five main theories namely: - Adult learning theory, Mezirow's Theory of Perspective Transformation, Systems Theory, Reference Group Theory and Gross, Giacquinta and Bernstein (1971) theory of implementing Curriculum innovations. The units of analysis were 424 Adult Education Learning Centres. The study population was 181 Adult Literacy teachers, 7104 adult education Learners, 424 Managers of Adult Education Centres, and 8 District Adult and Continuing Education Officers (DACEO's). The researcher used both stratified and saturated random sampling and using an automated system picked out a corresponding sample of 19 adult education centers, 104 adult education learners, 18 adult education teachers, 19 adult education center managers and 8 District Adult and Continuing Education Officers (DACEO's). The instruments of data collection were questionnaires and interview schedules. Reliability of the instruments was addressed through piloting in one adult education centre and a reliability co-efficient of 0.745 which indicated that the instruments were reliable were obtained by subjecting the instruments to a Split-half Technique and Spearman "Brown Prophecy Formula". Experts ensured the instruments met the face, content and construct validity, they were precise and consistent and that the tools were measuring what they purported to measure in order to ensure wider acceptance. Data was analysed using both qualitative and quantitative methods. The findings of the study were as follows: -unwillingness of the learners to pay for the program, a negative perception of the program, a marked sense of skepticism about adult education, and lack of conviction about the benefits of the program were the perceptual constraints of adult education learners on implementation of adult education in Machakos County. It was concluded that there indeed existed perceptual, managerial, methodological, monitoring, and supervisory constraints facing curriculum implementation of adult education programs in Machakos County. It was recommended that efforts be made to destigmatize the program and funds be availed. It was suggested that further research be conducted on stigma, low men enrolment and policy framework.

Key Words: Constraints, Adult education, Curriculum and Teaching Methodologies

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LIST OF ABBREVIATIONS

ACE: Adult and Continuing Education

AE: Adult Education

ALRWG: Adult Literacy Research Working Group

ASE: Adult Secondary Education

CACEO:County Adult & Continuing Education Officer

CEB: County Education Board

CDE: County Director of Education

CC: County Commissioner

CS: Cabinet Secretary

DACE:Directorate of Adult and Continuing Education

DACEOs:District Adult & Continuing Education Officers

DAESs:Division Adult Education Supervisors

DC: District Commissioner

DEO: District Education Officer

EAC:East Africa Community

EGRA: Early Grade Reading Assessment

ESOL:English for Speakers of Other Languages

FBOs Faith Based Organizations

KCSE:Kenya Certificate of Secondary Education

GMR: Global Monitoring Report

NAAL:National Assessment of Adult Literacy

NCES:National Center for Education Statistics

NACOSTI: National Commission for Science, Technology and Innovation

SPSS: Statistical Package for Social Sciences

UNESCO: United Nations Educational, Scientific & Cultural Organization

LIST OF ACRONYMS

LLECE: Latin American Laboratory for Assessment of the Quality of Education: Regional Comparative and Explanatory Study

NCSALL: National Center for the Study of Adult Learning and Literacy

PASEC: Program for the Analysis of CONFEM Education Systems

PIAAC: Program for the International Assessment of Adult Competencies

PIRLS: Progress in International Reading Literacy Study

PISA: Program for International Student Assessment

SACMEQ: Southern and Eastern Africa Consortium for Monitoring Educational Quality

OPERATIONAL DEFINITION OF TERMS

The following terms as used in the context of this study have been defined as follows:-

Adult basic education and training: Any kind of study, solution or counseling that seeks to meet the needs of adults and out of school youth with short formal education who did not have an opportunity for formal schooling.

Adult education learners: These are adults and youth above 15 years who attend and participate in adult literacy programs.

Adult literacy teachers: A category of persons who help facilitate the teaching-learning process amongst learners in adult literacy classes in a formal school set-up.

Curriculum: The entire mass of adult education learning materials and delivery strategies that is planned to enable adult learners to acquire and develop the desired knowledge, skills and attitudes.

Curriculum development: The systematic planning of the Adult Education teaching and learning process for the realization of the Adult basic education and training goals.

Curriculum Implementation: The integration of the adult education instructional content, arrangements, interventions, management, and monitoring in the classroom.

Constraints: Physical, social or financial restrictors that hinder the effective implementation of adult basic education and training curriculum in Machakos County.

Continuing education: An education program designed for youth above 15 years and adult learners who are otherwise unable to be involved in formal full-time learning.

Perception - The way in which adult education learners regard, understand and interpret adult basic education and training especially in regard to its value in their own lives.

Conception – The way adult basic education and training is perceived or regarded by stakeholders and the general public.

Teaching Methodologies - the principles and methods used by adult basic education and training teachers for curriculum content delivery and instruction based on the information or skill being taught and the aptitude and enthusiasm of the students.

Pedagogy- The art of teaching and instructional methods used in child-centred learning.

Andragogy - The methods and strategies used by adult basic education and training teachers to help adults to learn.

Geragogy- Unique instructional methods, strategies and considerations specifically tailored to enable frail elderly persons to learn.

Eldergogy- a specialized approach employed by adult basic education and training teachers in order to assist the elderly to learn.

Metagogy - A process of collaborative learning that works on interdependence of learning for the advantage of the individual as well as the community that is used by adult basic education teachers when teaching adults.

Adult Learning Theory- The basic concepts of behavioural change and experience among adults as brought about by the teaching –learning process.

Mezirow's Theory of Perspective Transformation –A theory that explains learning experiences which shape the adult learner and produce a significant impact, or paradigm shift, which affects the learner's subsequent experiences.

Reference Group Theory –A theory that presupposes that humans have a reference group in which they compare themselves to for the purpose of evaluating their behaviours.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter presents the background of the study, statement of the problem, objectives of the study, research questions, significance of the study, scope and limitations of the study and assumptions of the study.

1.2 Background to the Study

The critical role of adult education in the development of society has long been recognized. The understanding of the role of adult education has changed and developed through time. From being seen as promoting international understanding in 1949, adult education is now seen as a key in the economic, political and cultural transformation of individuals, communities and societies in the 21st century. While UNESCO has spelled out a definition of adult education in the *Nairobi Recommendation*, what is considered as adult education is still subject to a wide range of interpretations (UNESCO, 2009).

The particular interpretation of Adult and Continuing Education (ACE) in this study is that it is the entire body of learning processes within the perspective of lifelong learning whereby adults are given opportunities to: develop their abilities, enrich their knowledge and improve their skills to meet their own needs and those of their society. ACE program encompasses formal, non-formal, and continuing education and a spectrum of informal and incidental learning available in a multi-cultural learning society. The informal and incidental learning involves among others:- communal exposure, interactions with different personalities in otherwise new environments, some degree of mentorship from more experienced or schooled colleagues and in some cases acquisition of some skills not necessarily taught as a result of

observation and imitation. This in effect means that the extent of learning in adult education goes much further than the intended or envisaged accomplishments.

In Kenya, ACE is provided by the Government of Kenya (GoK, 2009), Non –Governmental organizations (NGOs), Faith Based organizations (FBOs), donor agencies and individuals. Most of these providers have been offering varying curricular depending on their interests. The government of Kenya recognizes and appreciates the role played by these partners in providing education. However, to ensure that quality education is provided to its citizenry, the government, through the Ministry of Education, carried out a needs assessment survey in 2008. It is this survey that determined the learning needs of adult learners (Republic of Kenya, 2009). Since according to Nyatuka and Ndiku (2015) ACE is aimed at achieving civic, social, moral and cultural attitudes as well as skills necessary in order to progress in every sphere of life, every effort to ensure its success and especially on the implementation of its Curriculum should be prioritized.

Bhola (2004) asserts that more than 950 million people are illiterate. Given that many countries depend on self-reporting to set their literacy rates and define as literate anyone who has been to even one year of school, this figure is probably a significant underestimation of the adult illiterate population. For example, in 1985 the World Bank reported the literacy rate in Lesotho as 74 percent, but in that same year an independent assessment found that only 62 percent of a sample population could perform satisfactorily on a test of simple reading and writing skill and only 46 percent could pass a test of basic mathematics. UNESCO reports the United States' literacy rate at greater than 95 percent, but the recently completed National Adult Literacy Survey finds that at least 45 percent of the U.S. population has low or severely

limited basic skills. Because approximately 100 million of the world's primary school age children are not attending school and many who do attend drop out in the first two years, the world's illiterate population will not decrease dramatically over the next ten years without a much greater adult education effort. (Comings & Kahler, 2003).

The info-graphics from the Education for All Global Monitoring Report done in 2011 estimated that globally, 774 million adults were illiterate and of these, two-thirds were women. A year earlier in 2010, it had also been established that 775 million adults were illiterate. This is a 12percent decrease since 1990 and slightly one percent since 2000. In 2015, the GMR had projected the number to fall to 743 million. Most countries in Sub-Saharan Africa have reported improved average literacy rates, but considerable progress is yet to be achieved. While the rates have remained constant in EAC, ECCAS and SADC, the ECOWAS region has some of the lowest average rates (67percent for adults; 73percent for youth). Generally, the number of illiterate adults has increased by 37percent since 1990, and this has been mainly due to the rapid population growth. It had been projected that by 2015, 26percent of all illiterate adults will live in sub-Saharan Africa, up from 15percent in 1990(GMR 2014). However, this appears not to be the case today. The problem of illiteracy in Sub-Saharan Africa can be attributed to inadequacy of resources allocated to adult literacy as well as social disparities. (UNESCO, BREDA (ADEA) 2012).

Three years earlier before the Education for All Global Monitoring Report of 2011 i.e. in 2009, a large-scale international assessment of adults' reading ability in the world by the international assessment of adult literacy found that 12 to 14 percent of adults, about 27 to 31 million people, were below basic readers. Eleven million of the 27 to 31 million adults were

below the basic literacy level, or about 6 percent of all adults, were found to be non-literate in English. According to the international center for education statistics which conducted the study in 2009, these adults were unable to consistently read and understand information at the basic level, or the level at which the average high school graduate read (Titmus, 2009). This includes information in short, commonplace texts and simple documents, such as news articles, pamphlets, bus schedules and food labels. Many adults at the below basic literacy level have difficulty with even simpler reading tasks like locating specific information in short, commonplace texts (Kutner, 2007).

Adult learning and education are located at the heart of a necessary paradigm shift towards lifelong learning for all as a coherent and meaningful framework for education and training provision and practice. The framework given by the concept of lifelong learning should engender borderless education. (Torres, 2009; UNESCO, 2005). This means open, flexible and personally relevant opportunities to develop the knowledge, competences and dispositions that adults at all stages of their lives need and want. It means providing learning contexts and processes that are attractive and responsive for adults as active citizens – at work, in the family, in community life and, not least, as self-directed individuals building and rebuilding their lives in complex and rapidly-changing cultures, societies and economies. Lifelong learning as an integrating framework for all forms of education and training is not new. However, its recent rise as a feature of policy discourse derives from linked changes of global relevance; economic and cultural globalization; simultaneous dominance of and crisis in market economies; social modernization processes and the transition to knowledge societies (Torres, 2009; UNESCO, 2005).

Curriculum is the foundation of the teaching-learning process. The development of programs of study, learning and teaching resources, lesson plans and assessment of students, and even teacher education are all based on curriculum. Curriculum and curriculum development at first glance appear to be of chief concern to educators, governments and parents, and both have relevance and impact on the development of communities (UNESCO, 2009). This is because the outcome of any teaching-learning process is as good as the curriculum that was used by the teacher or trainer.

According to Titmus (2009), the Kenyan government has since independence put emphasis on adult literacy in order to achieve fast and sustainable socio economic development. (UNESCO, 2007). The objectives of the adult education programs are to: eradicate illiteracy, provide knowledge, skills and attitude for work, create self-confidence and foster positive behavior towards life. To achieve this, the learners have to be exposed to specific content. The content in adult education curriculum includes literacy, family life, health, and nutrition, civics, environmental studies and agriculture. It is hoped that if this content is covered well, it will make Kenya achieve the objectives of adult education and by extension national development as stipulated in vision 2030 (Kibera, 2007).

However, the provision of adult education throughout Kenya has been constrained because the department of adult education has been located in various ministries (Ministries of Higher Education, Science and Technology, Ministry of Youth Affairs and Sports and Public Health and Sanitation), since 1966 and has not been adequately funded (Chenowith, 2011). Meeting the goal of adult education requires structural and curriculum reforms to fit into the aspirations of the constitution (2010) and the Kenya vision 2030 and in particular, to raise

levels of literacy. The educational policies followed after independence in 1963 were marked by the quantitative expansion of schooling opportunities at all levels of the education system. In the observation of Levin (2007) the challenges in adult curriculum implementation often arise from gaps between the intended curriculum (policy, vision, rationale and philosophy underlying a curriculum), and the implemented curriculum (curriculum as interpreted by school administration and teachers; the process of teaching and classroom practices) and lastly, the attained curriculum (learning as experienced by learners, resulting from defined learning outcomes for students). If a curriculum revision process is overly ambitious, is carried out within short timelines and is within an environment of low investment in teachers, problems will inevitably arise. A particular curriculum may include knowledge and require pedagogy that teachers may or may not have. To address this problem, education systems provide professional development for teachers, but it is highly unlikely, given the amount and variety of curriculum content, that we can provide enough support to enable most teachers to teach most subjects with a very high level of content and pedagogical knowledge. A further discussion on adult teacher training is presented elsewhere in this study.

According to Machakos County Adult Education Office, Quarterly Reports (2014), the majority of the learners are farmers; therefore they find it physically difficult to attend the NFE programme after their hard days work. This has led some adult learners to miss classes and create variability in learning progress, and in return has made it difficult for facilitators to accommodate all the learners' needs. Because most of the NFE centres are located in remote areas and some are not accessible by road, it is difficult to monitor them and support their needs. This also hinders constant and effective monitoring, evaluation and support. Due to scarce IT-trained personnel and facilities in almost all the NFE centres, it is difficult to keep

reliable data at the NFE centres which is creating problems in the planning and execution of the programmes.

In spite of recommendations made on Education Reforms by The Task Force on the Re-Alignment of the Education Sector to Vision 2030 and The Constitution Of Kenya 2010 that The Government continues reducing the cost of education to households through the provision of teachers, teaching and learning materials and grants to schools to cover operational and maintenance expenses under the Free Primary education (FPE) and Free Day Secondary Education (FDSE) policy; capitation grants be allocated to learners in adult education and other forms of basic education, so that the learners can benefit from mainstream financing and enhanced skills development the provision of Adult and Continuing Education in Machakos County has suffered from inadequate funding, thereby defeating the aspirations of Vision 2030 (Republic of Kenya, 2013). Of particular concern is the raising of the levels of literacy.

The Kenya National Adult Literacy Survey (KNALS, 2007), revealed that only 61.5% of the adult population has attained minimum literacy level, leaving 38.5% (7.8 million) adults illiterate. It also revealed that only 29.6% of the Kenyan adult population has attained desired literacy competency. About 29.9% of the youth aged 15 to 19 years and 49% of adults aged 45 to 49 years are illiterate. Adult literacy education programs do face challenges. These include lack of adequate resources for things such as scholastic materials; lack of enough trained teachers; lack of classrooms; learners needing to walk long distances to class; paucity of employment prospects upon completion of the programs; no remuneration for instructors; missing of classes during rainy seasons; no opportunity for further training, absenteeism and

the program not addressing the learners' problems. There is considerable shortage of classrooms, a shortage of well-qualified and expert teachers competent to lead their learners through the new competency based curriculum and learning styles, and the absence of an assessment and examination regime able to reinforce the new approaches and reward students for their ability to demonstrate what they know, understand and can do.

In Kenya, as elsewhere, politics occupy a central place in the daily affairs of the nation. The political class seeks to control and manipulate the polity, either overtly or covertly. In the argument of Freire (2012), education is normally a covert tool in the stratagem of the political class. Political influence in curriculum implementation in Kenya is best seen through the formation of various education commissions, committees, and working parties. Since independence, there have been seven major commissions on the school curriculum. The composition of these commissions is largely oblivious of expertise in curriculum; rather, it mostly exhibits political connectedness. Moreover, the findings and recommendations of most of these commissions are implemented at the discretion of the ruling elite. In most cases, these commissions end up being just grand academic exercises since their recommendations are never adopted.

Literacy campaigns have usually been connected to political processes, and have been under pressure to provide service to all those in need. Program implementation has suffered from unrealistic time constraints and inadequate resources, resulting in high drop-out rates and low skill acquisition. The measures of skill retention have been inaccurate because the skill was never acquired in the first place. When sufficient resources and time are allocated to the

design and field testing of a comprehensive program, adult education can be successful (Chenowith, 2011).

A review of all of the available evaluation studies of adult literacy programs in Third World settings concluded that poor program design and implementation are the causes of inefficiency. Where programs are well designed and implemented, drop-out rates are between 30 and 50 percent, equivalent to drop-out rates in the first three years of primary school, and the adult participants achieve a skill level equivalent to primary school grade 3 or higher. The financial loss is thereby great given the fact that per- student expenditures are much higher in primary school than the per participant expenditures in adult literacy programs (Baer, Kutner & Sabatini, 2009). While these concerns are legitimate and largely true, and pose a real danger to the teaching –learning process, the situation in Kenya has some variance as evidenced in the following paragraph.

In Kenya, the development process of adult teacher education Curriculum is fully funded by the State Department of Education through the Ministry of Education. The present ABET Curriculum has its origin in the critical findings of the Kenya adult literacy survey carried out in 2006 that revealed that an average 38.5% of the Kenyan adult population is illiterate. Since this provided a major challenge as the country strove to achieve vision 2030, the Government decided to act. Consequently, and in response to such concerns, the Kenya Government through its Ministry of Education, brought together the then Kenya Institute of Education (KIE) now Kenya Institute of Curriculum Development (KICD), the Kenya Education Management Institute (KEMI) formerly known as the Kenya Education Staff Institute (KESI), the Directorate of Adult Education (DAE), teachers from various institutions, college tutors and others to develop the ABET syllabuses. It was this highly formidable team in terms

of expertise, skill and knowledge that re-organized and enriched the adult education curriculum, which was developed in 1989. In order to ensure smooth transition and progression of adult learners to either education or/and training, the adult education curriculum was developed under three levels namely: adult education and training levels 1, 2 and 3 (ABET I, II and III) (Republic of Kenya, 2007).

A careful study of the above Curriculum gives evidence of a well thought out professional work that has been developed using current conventional and acceptable principles of Curriculum development. It thus can rightfully be said that the problem with the Adult basic education Curriculum is definitely not poor program design but inefficient implementation.

The Kenya Vision 2030 Medium Term Plan II Education and Training 2013-2018, Towards a Globally Competitive and Prosperous Kenya, submits that the challenges that have affected Adult and Continuing Education programs over the years are among others; inadequately trained literacy and adult education teachers. There is also a high turnover of staff and volunteer teachers, limited resource allocations and inappropriate infrastructure. Lack of capitation grants for instructional materials, school going children attending adult classes, gender imbalance, negative attitudes and perceptions towards adult learning, inadequate teachers and learning centers, poor definition of literacy also haunt the sector .It's noteworthy that, although the Government established the Directorate of Adult and Continuing Education to coordinate the relevant programs, it has not been adequately resourced. As a result, access to ACE and NFE programs are low whilst gender disparities are high. ACE and NFE is affected by a negative image. The lack of teaching and learning materials, the application of appropriate quality assurance mechanisms, and without coordinated service delivery, leaves the sub-sector in need of major reform and resourcing. A further issue concerns the transition

of adult learners from primary to secondary education and the appropriateness of the curriculum (Republic of Kenya, 2013).

According to the Kenyan Government own admission, Adult and Continuing Education programs over the years have been affected by inadequate trained literacy and adult education teachers, a high turnover of staff and volunteer teachers, limited resource allocations and inappropriate infrastructure, lack of capitation grants for instructional materials, school going children attending adult classes, gender imbalance, negative attitudes and perceptions towards adult learning, inadequate teachers and learning centers, and a poor definition of literacy. Further, the lack of teaching and learning materials, the application of appropriate quality assurance mechanisms, and without coordinated service delivery, leaves the subsector in need of major reform and resourcing (Republic of Kenya, 2012). This puts curriculum implementation in the adult education programs in jeopardy.

This dire situation of affairs is confirmed by the Machakos County Adult Education office 2014 quarterly reports, who submit that Machakos County has 7104 adult learners spread across 424 Centres who are served by 181 comprised of 73 full –time teachers, 75 Part-time teachers and 33 Self-help teachers. Since both the part-time and self-help teachers are basically volunteers who teach according to their own availability and convenience and thereby unreliable, the 7104 adult learners are squarely at the hands of the 73 full-time teachers. This then puts the adult teacher and adult learner level at a ratio of 1:97! Indeed, this ratio exceeds by almost double the 55:1 and 45:1 ceiling recommended for Primary and Secondary Schools respectively by the Kenyan Ministry of Education.

It is with this background that a need arose to study curriculum implementation in adult learning programs in Machakos County. The major concern of this study therefore, is to carry out a study on constraints affecting curriculum implementation in adult basic education and training in Machakos County.

1.2 Statement of the Problem

According to the Machakos County Adult Education office 2014 quarterly reports, a part from the inadequate teaching staff, Machakos County also has to contend with unskilled part-time teachers and demoralized part-time teachers due to little or no honoraria. There is also lack of proper learning venues and other facilities; lack of transport for supervisory staff; insufficient funds; low attendance of learners; stigmatization of the programme and also the adult education learners; dilapidated learning venues and furniture, and centres expansively spaced posing a mobility challenge as Adult Education officers can only visit a few centres within a day. This raises a lot of concern since almost all the above challenges pose a direct threat to Curriculum implementation and points to the likelihood of some serious constraints affecting the implementation of the adult education curriculum in the County. This problem is worsened by the fact that adult education programs have little or no funding at all by both the National and County governments. Notably, even the County adult education is not represented in the County Education Board unlike the case with Primary and Secondary education. The study therefore intends to find out whether the adult education Curriculum has been well implemented, and if not establish the issues that could be hindering the implementation process and propose ways in which these hindrances can be overcome or at least put under control.

1.3 Objectives of the Study

Objectives that guided the study were to:

- i) Determine perceptual constraints of adult learners on the implementation of adult basic education.
- ii) Establish constraints affecting adult education managers on their understanding of their role in curriculum implementation.
- iii) Explore methodological constraints of teaching adult basic education in the implementation of the adult basic education
- iv) Identify problems facing adult education officers in monitoring and supervision of adult education programs.

1.4 Research Questions

- i) What are the perceptual constraints of adult education learners in Machakos County in the implementation of adult basic education Curriculum?
- ii) What are the constraints of education Managers in understanding their role in the implementation of adult basic education Curriculum in Machakos County?
- iii) How are teaching methodologies that are used in adult education a constraining factor in the implementation of adult basic education curriculum in Machakos County?
- iv) What are the problems faced by adult education officers in the monitoring and supervision of adults basic education programs that may constrain curriculum implementation in Machakos County?

1.5 Significance of the Study

A study on the implementation of adult education on adult literacy program will provide baseline data to both governmental and non-governmental institutions in Kenya that will be useful for future mainstreaming of adult basic education and training program. The findings of the research will assist the proper implementation of adult learning programs. The results are useful to the Directorate of Adult and Continuing Education (DACE) in matters concerning policy formulation on adult education. The research findings are also useful to organizations concerned with illiteracy eradication especially when they need to strategize in the best way to promote accessibility to adult education. Researchers will also be assisted by the research findings to identify the research gaps in the field of curriculum implementation in adult education.

1.6. Scope of the Study

This study was conducted in Machakos County. This County was chosen because of the fact that at the time of the study, the County Adult and Continuing Education office had voiced its concerns to the CEB (through the CACEO) to the researcher in his capacity as the Deputy chair of the County Education Board (CEB) and the Chair of the Basic Education Committee in regard to the constraints the Department was facing in curriculum implementation. This initiative by the CACEO was on its own a testimony to the appalling situation of adult education in the County. The specific area of study and the enormity of the subject under study was born as the researcher was trying to assist the CACEO's office to come up with a concept paper to try and get some funding from the Machakos County Government. The researcher is a resident of Machakos and this consideration took care of both distance and cost of the study. The particular focus on Adult education was chosen because presently the

Department is not represented in the County Education Board (unlike Primary and Secondary Schools), has no funding from both the County and National Governments and virtually relies on well-wishers to carry out its operations including even the hosting of International days like the World Literacy Day, which ordinarily should have funding from the National Government. The research was confined to only 19 adult education centers in Machakos County.

1.7 Limitations of the Study

The following are some of the limiting factors that were experienced during the study. The time allowed to carry out the study was designed for an academic course that was limited to specific time period. The research was only confined to Machakos County and therefore its findings can only be generalized to other parts of Kenya and the world. Further, the study only dealt with curriculum implementation and left out other vital aspects of education such as Access, Relevance, Equity and Quality.

1.8 Assumptions of the Study

The researcher assumed that the respondents of the study would be willing to respond to the questions raised in the questionnaire. It was also assumed that there would be no serious changes in the composition of the target population that would be fundamental enough to affect the effectiveness of the study sample. That the study would be carried out as planned and the researcher was in good health to accomplish all the objectives of this study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter has ten sub-sections of general background of subject of study and objective driven themes in general. The first sub-section dwells on the Adult Education Curriculum, the second sub-section deals with the training of adult education teachers, the third addresses implementation practices of adult education programs. The fourth sub-section reviews perceptual constraints of adult learners on the implementation of adult basic education; the fifth sub-section deals with the constraints of education managers on their understanding of their role in adult basic education, the sixth sub-section is a review of the methodological constraints used in teaching adult basic education on the implementation of adult basic education. The seventh sub-section is a comparison and a Contrast of the Teaching Methodologies. The eighth is a review of the problems facing adult education officers in monitoring and supervision of adult education programs. The ninth is a Theoretical Framework of the study and the tenth and last one is the Conceptual Framework explaining the study. At the end of each subsection, an integrated critique is given which opens gaps that the present study addresses.

2.2 Adult Education Curriculum

In its endeavor to provide education to all citizens, the government of Kenya has come up with several programs that target specific groups in its population (GoK, 2009). Adult and continuing education is one of them and is recorded as an important part as well as a strong back up for the achievement of education for all (EFA) and Millennium Development Goals (MDGs). The Kenya government further intends to attain industrialization by the year 2020.

One way of achieving the goal is by raising literacy levels among adults. The critical findings of the Kenya adult literacy survey carried out in 2006 revealed that an average 38.5% of the Kenyan adult population is illiterate. This is a major challenge as the country strives to achieve vision 2030. In response to such concerns, the Kenya Institute of Curriculum Development (KICD) in collaboration with the Directorate of Adult Education have re-organized and enriched adult education curriculum, which was developed in 1989. This re-organization and re-enrichment involved a concerted effort of Kenya institute of education staff, directorate of adult education, ministry of education, teachers from various institutions, college tutors and other experts and stakeholders within the wider education sector. (Republic of Kenya, 2009)

According to Massachusetts Policies for effective adult basic education in community adult learning centers and correctional institutions (2015), curriculum refers to a coherent plan that links goals for learning and the work that happens in the classroom. As a course of study and a set of tools that includes scope and sequence, it guides teachers to enable students to develop knowledge and skills needed to qualify for further education, job, training and better employment. By implication, Curriculum is a systematic plan of delivering course/program content that guides teachers and facilitators to accomplish a deliberate objective that the learner so requires in order to fulfill their goal for joining the course or program. Hence, a credible Curriculum should develop valuable content and put into account the objective of the lesson versus the needs of the learner and the appropriate strategies required to ensure successful delivery and reception of the content. In regard to adult basic education and training programs, Olufunke (2013) further adds that adult education programs should be

well designed and delivered to provide quality services that focus on the serious needs of the country and also meet clear and measurable objectives.

In his Classical undated work entitled *A guide to Planning and Implementing Instruction for Adults*, Lumb (n.d) argues that central to most adults' reason to join adult education is the motivation to maintain and/or improve current skills and abilities that are relevant to one's job. Lumb further avers that developing instructional materials for adults requires a deeper level of understanding of the motivations, needs, and reasons behind their participation in a learning environment. This is, perhaps, the very reason why developing an adult education program requires much more than the traditional approach and systems for developing formal education Curricula. It should be further noted that adults have very personal reasons and unique expectations for joining an education program and these have to be met if the adult is expected to continue with the program. This explains why a notable number of adult education programs have high wastage rates and ordinarily have low enrolments even when they are located in the midst of potentially illiterate populations. It is against this background that the development of an adult Curriculum should be preceded by a baseline survey of the intended adult group and if not the facilitator should be alert enough to incorporate emerging issues in the course of the lessons. Such an approach would ensure that the adults' specific concerns are addressed.

In Kenya, one of the emerging issues in adult education Curriculum and what can be considered a specific concern by itself has been the language of instruction. This concern has been brought to the fore by the fact that Kenya is the home of 42 plus ethnic groups that have diverse languages and culture. Since adult education is basically the starting point of literacy

for a majority of the learners, it is then obvious that such learners would have a great challenge in mastering or even understanding any teaching no matter how simple it is if they do not know the language in use. Against the background that all learning materials are generally in the two official languages in Kenya and as a response to this need, the Kenya Institute of Curriculum Development (KICD) in collaboration with the Directorate of Adult Education developed primers in local languages among the Digo, Giriama, Kidawida, Pokomo, Kikuyu, Meru, Dholuo, Suba, Ekegusii, Kalenjin, Luhya, Kiswahili, Borana, Somali, Kamba, Turkana and Samburu. Other partners have developed similar materials for use by minority language groups such as Daasanach, Ilwana, Waata, Aweer, Marakwet, Tharaka, Duruma, and Sabaot among others. This is in line with the education language policy in the provision of basic literacy and lower classes instruction using mother tongue or the dominant language of the catchment area (UNESCO, 2015).

Dirkx and Prenger (1997), who observe that adult learning needs dictate that instruction should focus on particular problems, issues, and concerns as they relate to the learners' immediate needs, support Lumb's argument. Consequently, teaching themes should include the learner's input to the proposed education and training. Program themes on the other hand should also include the context and content of the proposed lesson materials, desired competencies and skills needed by the students, and input from the instructor based on his or her knowledge of the material itself (Dirkx & Prenger, 1997; Lumb, n.d). Instructional development includes attention to process skills, creativity, teamwork, brainstorming, problem solving, critical thinking, learning to learn skills and interpersonal communications that learners use when engaging in the learning process (Dirkx& Prenger, 1997).

The environment in which a particular Curriculum is hosted determines to a large measure the success level of the Curriculum. Curriculum developers should provide some guidelines on to what specific environment is required while those implementing the Curriculum should correctly discern the appropriate environment for the particular Curriculum. Vella(1994)provides the following twelve principles for creating effective adult learning environments that have application to any developing curriculum:- needs assessment- participation of the learners in planning what is to be learned; safety in the environment and the process; a sound relationship between teacher and learner for learning and development; careful attention to sequence of content and reinforcement; Praxis-action with reflection or learning by doing; respect for learners as subjects of their own learning; cognitive, affective, and psychomotor aspects- ideas, feelings, and actions; immediacy of the learning; clear roles and role development; teamwork- using small groups; engagement of the learners in what they are learning and accountability- how to know they know.

The development or existence of proper Curriculum development frameworks, according to Houle (1972) is another hallmark for a well-developed adult education curriculum. These frameworks provide the general direction of the training in addition to ensuring that key tenets are adhered to and major curriculum components and ingredients are incorporated. Houle's Decision Points and Framework for Developing Adult Education Programs that involves:- identifying a possible educational activity; making a decision to proceed; identifying objectives and refining them; and designing a suitable format which identifies resources, leaders, methods, sequence, schedule, social reinforcement, individualization, roles and relationships, criteria or evaluation and clarity of design come in handy. Houle (1972) concludes that the format is fitted into the larger pattern of life that involves guidance,

lifestyle, finance and interpretation. The plan is then put into effect and finally the results are measured and appraised.

In Kenya, the Kenya Institute of Curriculum Development (KICD) in collaboration with the Department of Adult Education (DAE) develops adult education Curriculum. The KICD is a professional body that specializes in Curriculum development for all formal levels of education with an exception of University education. As mentioned earlier, KICD has as to date developed three Curricula for the adult learners i.e. ABET I, II and III). ABET II and III curriculum comprise both academic and skills training based subjects. The academic subjects include; English, Kiswahili, Mathematics, Social studies and Science. The skills training subjects are; Agriculture, Business Studies and Homecare and Craft (Republic of Kenya, 2007).

In the development of these Curricula, KICD has put into consideration both the eight National goals of Education in Kenya, the five goals of adult education in Kenya and the ten objectives of Adult and continuing education. In regard to the National Goals of Education, Education in Kenya should:-foster nationalism, patriotism and promote national unity by removing conflicts and by promoting positive attitudes of mutual respect which enable people to live together in harmony, and foster patriotism in order to make a positive contribution to the life of the Nation; promote the social economic, technological and industrial needs for national development by initiating changes in attitudes and relationships, producing skills, knowledge, expertise, personal qualities and attitudes; promote individual development and self-fulfillment through character building; promote sound moral and religious values through the development of knowledge, skills and attitudes that will enhance acquisition of sound

moral values; promote social equality and responsibility by giving challenging opportunities for collective activities and corporate social service irrespective of gender, ability or geographical environment; promote respect for and development of Kenya's rich and varied cultures by enabling learners to blend the best of traditional values with the changed requirements that must follow rapid development in order to build a stable and modern society; promote international consciousness and foster positive attitudes towards other nations by leading the youth of the country to accept membership in this international community with all the obligations and responsibilities, rights and benefits that this membership entails; promote positive attitudes towards good health and environmental protection by inculcating in the youth the value of good health and foster positive attitudes towards environmental development and conservation (UNESCO, 2010).

On a wider scale, the goals of adult education as enlisted by the Republic of Kenya (2012) include:-eradicating illiteracy-helping adult learners to acquire sustainable literacy skills that will enable them to fully participate in socio-economic development activities; promoting post-literacy for all by enhancing participation of learners in the national development process through a national post-literacy program; promoting the use of Kiswahili as a national language by giving learners skills and knowledge in Kiswahili to help them interact and understand each other thereby promoting communication across ethnic and cultural boundaries ;enhancing positive attitudes towards our cultural heritage by making the people see the values, languages, beliefs, myths, religion and folklore as our springboards for patriotic behaviour, loyalty confidence and self-direction as citizens of Kenya; and encouraging learning as a life-long process by promoting a learning culture and the use of available learning resources to cope with changes in contemporary society.

Objectives of adult and continuing education, set by the Republic of Kenya in 2009 are to:-

Help eradicate illiteracy by providing the basic skills of reading, writing, communication and numeracy; sustain literacy through post-literacy and continuing education; promote the concept and practice of life-long learning; promote the acquisition of relevant knowledge, attitudes and skills to facilitate adaptation of new technologies and production skills; facilitate the development of economic opportunities through improved entrepreneurship and production skills; provide education suitable to vulnerable groups; Promote self-confidence, values and positive behavior; promote awareness among individuals and communities with regard to their rights and civil duties; create awareness and promote appreciation of other nations and international community and nature positive attitude towards good health and environmental conservation.

In an effort to demystify the art of learning, Malcolm Knowles, one of the foremost experts on teaching adults, provides guidance to creating a learning environment by stipulating aspects of the conditions of learning and the ideal role of the teacher in making it happen.

Figure 2.1 below explains Knowles concept.

Figure 2:1 Conditions of Learning and Roles of the Teacher

The Conditions of Learning	The Role of the Teacher
The learners feel a need to learn. Motivated learners make the role of the teacher crucial to success. Learning usually does not happen by itself and is somewhat dependent on the teacher's direct involvement. The teacher assists the students in determining where they currently are with respect to learning and where they want to be when the course or program is completed.	1. Exposes students to new possibilities of self-fulfillment. 2. Helps each student clarify his or her own aspirations for improved behavior. 3. Helps each student diagnose the gap between his aspiration and his present level of performance. Helps the student identify the life problems they experience because of the gaps in their personal skills, knowledge and abilities.
The learning environment. <i>Characterized by:</i> Physical comfort Mutual trust and respect Mutual helpfulness Freedom of expression Acceptance of differences	Provides physical conditions that are comfortable (seating, temperature, ventilation, lighting, etc.) and conducive to interaction among participants. Accepts each student as a person of worth and respects his feelings and ideas. Seeks to build relationships of mutual trust and helpfulness among the students by encouraging cooperative activities and refraining from inducing competitiveness and judgmentalness. Teacher exposes his/her own feelings and contributes his or her resources as a co-learner in the spirit of mutual inquiry.
The learners perceive the goals of a learning experience to be their goals. As such, the teacher must be clear in outlining the goals and expectations of the course.	Students are involved in a mutual process of formulating learning objectives in which the needs of the students, of the instructor, the institution, the subject matter, and of the society are taken into account.
Learners accept a share of the responsibility for planning and operating a learning experience.	The teacher shares his/her thinking about options available in the designing of learning experiences and the selection of materials and methods and involves the students in deciding

Unlike the teaching of children where material and lessons are provided and they are expected to respond according to the direction of the teacher, adults want to participate and have a say in what will happen and what will be provided in the way of learning opportunities.

Learners participate actively in the learning process.

The learning process is related to and makes use of the experience of the learners.

Learners have a sense of progress toward their goals.

among these options jointly.

Dialogue is an important aspect of this process. Student input can be solicited and discussed so that agreement is present when the process is completed.

The teacher helps the students to organize themselves to share responsibility in the process of mutual inquiry. This involves project groups, learning-teaching teams, independent study and other methodologies.

The teacher helps the students exploit their own experiences as resources for learning through the use of such techniques as discussion, role-playing, case method, etc.

The teacher gears the presentation of his own resources to the levels of experience of his particular students.

The teacher helps the students to apply new learning to their experience, and thus to make the learning more meaningful and integrated.

The teacher involves the students in developing mutually acceptable criteria and methods for measuring progress toward the learning objectives.

The teacher helps the students develop and apply procedures for self-evaluation according to these criteria.

Source: Knowles (1978:77-79)

Curriculum design and instruction for adults requires some key considerations if the process has to bear the desired results. Indeed, if the Curriculum and instructional designer overlooks certain aspects of the process, then neither the curriculum nor its implementation shall fit the

purpose for which they were intended. In an attempt to deal with any such eventuality, Lumb argues that training must be related to current or closely related job responsibilities of the participant. Training must include input from participants as to content, delivery system/s, flexibility of availability, and if possible, a variety of delivery formats giving interested parties options on how they will acquire the material. Training must build on existing levels of experience of the participants and demonstrate continued utility to the immediate future as it pertains to their job expectations and duties.

Since the overall goal of any Curriculum is the impact it brings to those who go through the curriculum, learning achieved is of great essence. While the Curriculum itself is the input, the output is usually the learning, which is the ultimate reason why the curriculum exists in the first place. Actually, the intrinsic value of any Curriculum is measured by the extent to which it contributes to the learning process. Noting the importance of this key outcome of curriculum and instructional design, Hergenhahn (1988) observes that learning involves a relatively permanent change in behavior or in the potential of behavioral change resulting from experience and cannot be attributed to temporary body states such as those induced by illness, fatigue, or drugs. Maples and Webster (1980) offer further insight, in their assertion that learning can be thought of as a process by which behavior changes because of experiences.

The overall impact of the learning process is well captured by Crow's conviction that learning involves change and is concerned with the accumulation of habits, knowledge, and attitudes. Learning allows the individual to make both personal and social adjustments. Any change in behavior implies that learning has taken place (Crow *et.al.*, 1963). It is the change

of behavior that serves as evidence to both the learner and all other stakeholders in the teaching –learning process that the learning process was worth the investment.

In developing the ABET Curriculum ,the Kenya institute of Curriculum Development (KICD) (formerly K.I.E) appears to have considered most of the views articulated above by Houle (1961), Knowles (1978), Lumb (n.d), Hergenhahn (1988) and Crow and colleagues (1963)especially in regard to process, structure and key considerations. This is evidenced by the needs assessment survey of 2008 to determine the needs of learners carried out by the Ministry of Education the parent Ministry of KICD. The findings are well reflected in the ensuing development of the ABET 11 and 111 Curriculum that was developed in the following year (2009).

Notably, the ABET curriculum addresses the needs of Adults aged 18 years and above, as well as persons below 18 years who may be classified as adults due to roles and responsibilities they hold in their communities. Hence, it offers a flexible non-formal approach to learning which endeavors to meet the identified multiple and varied needs of the clientele. Further, it provides the learners with opportunities to acquire knowledge, skills and attitude necessary for their individual and national development. It is flexible in order to allow entry, dropping out and re-entry at any level. The curriculum is structured into three levels (I, II, III), each of which could be completed in 1½ to 2 years. The subjects offered in the ABET curriculum are as follows:-ABET I which is the most basic has four academic subjects namely:-English, Kiswahili, Numeracy and Reading and writing (mother-tongue).ABET II has five *Academic subjects* and three skills learning areas. The academic subjects areEnglish, Kiswahili, Mathematics, Science and Social studies. The *Skills learning*

areas are Agriculture, Homecare and Business education. ABET III has five academic subjects and three Skills learning areas. The *Academic subjects* are English, Kiswahili, Mathematics, Science and Social studies. The *Skills learning areas* are Agriculture, Homecare and craft and Business education (Republic of Kenya, 2009).

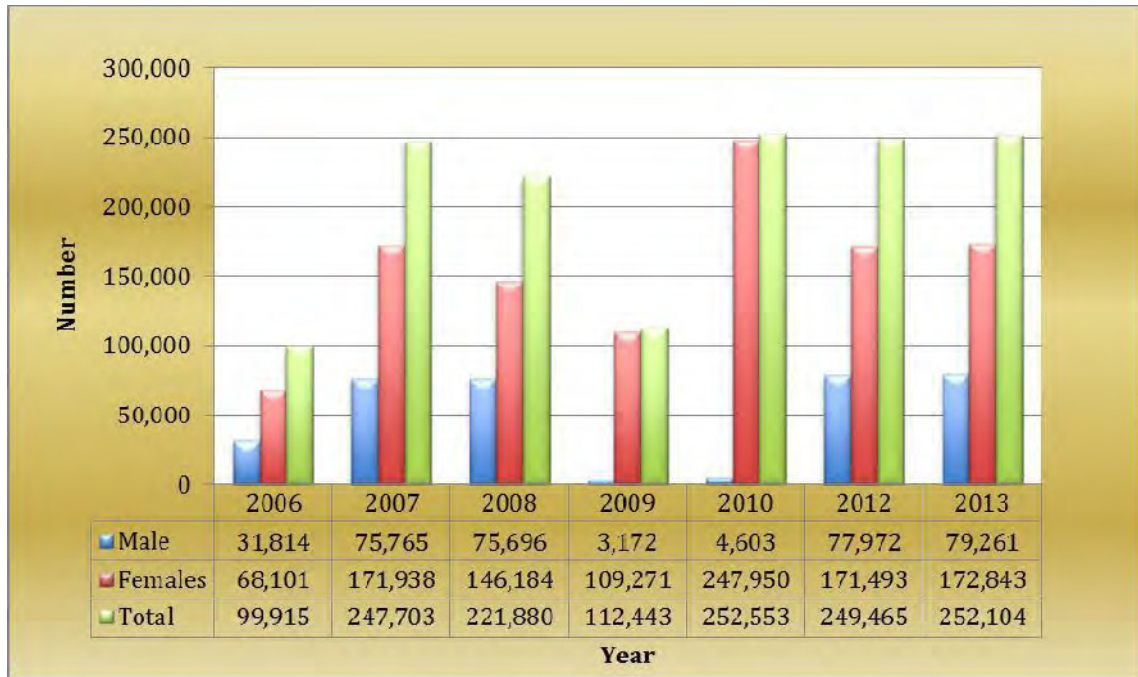
At levels II and III, learners can decide on which subjects they would like to learn. Those interested in proceeding with education in the academic will take all five(5) academic subjects. Those interested in skills development could take any number of subjects in the skills learning areas, and any other academic subject envisaged to be a prerequisite to the particular skills subjects being taken. The skills learning areas are packaged in modular form. Learners choose the number of modules to study, and are free to terminate their learning after obtaining the required level modules. On completion of each module, they are awarded a certificate of competency, which allows them to resume their studies at any time later on, so long as the curriculum remains the same. For one to be admitted into the Program, he/she should be an adult aged 18 years and above or any person below 18 years of age who may be an “adult” by definition based on their cultural roles. Secondly, such a learner should be out of normal and Non-formal Education (NFE) programs. Promotion or placement to the next level is done by the teachers based on assessment of competence acquired. The ABET Programs has three assessment modes namely:-Continuous assessment, Institutional/center examination at the end of each level and National adult basic education examination at the end of level III administered by KNEC (Republic of Kenya, 2009).

Just like in all other levels and systems of education in the Kenya, in the ABET Program, Proficiency examinations are administered to ACE learners upon completion of Basic

Literacy level. The tests are set and administered at the particular County from where instruction was given. The subjects taught and tested are Numeracy, English, Kiswahili and Mother Tongue based on the ABET curriculum. Successful candidates are awarded a Proficiency certificate. Notably, the candidature of ACE learners registering for proficiency examinations increased from 99,915 in 2006 to 252,104 learners in 2013 as shown in figure 2.2 below. The notable increment in candidature in 2007 can rightfully be attributed to the support grants provided to the centers under KESSP. This is backed by the fact that since the grants to the Adult Basic Education (ABE) centers were discontinued in 2009, consequently a decline was recorded. The increment from 2010 can be explained by the fact that in that year, there was recruitment of new instructors/teachers. These instructors opened new centers, taught and prepared learners to take the proficiency exams and this accounts for the increased candidature of learners. The above increase is an indication of an improvement in the levels of adult literacy in Kenya, especially for women learners who are the majority participants in the adult literacy programs.

Figure 2.2 below shows the Basic adult learners who registered and sat for proficiency examinations upon completion of the basic literacy program in the seven year period between 2006 and 2013.

Figure 2.2 Basic adult learners who registered and sat for proficiency examinations upon completion of the basic literacy program



Source: Ministry of Education Science & Technology

Whereas the above data shows a considerable achievement in terms of completion of the adult literacy program, the question that any adult educator would be left asking themselves is “Did effective and credible learning actually take place in the near quarter million graduates from the ABET program? The reason for asking this pertinent question is; though regarded as a simple activity; learning is a relatively complex engagement. According to Harris and colleagues (1961), learning can be distinguished as three phases namely: *-learning as a product* where the emphasis is on the end result or outcome of some learning activity; *learning as a process* where emphasis is on what happens during the course of a learning

experience in attaining a given learning product or outcome and *learning as function* which emphasize certain critical aspects of learning such as motivation, retention, and transfer.

When appropriate learning takes place, there is :- the discovery of a vocation or destiny; the knowledge or acquisition of a set of values; a realization that life is precious; acquisition of peak experiences; a sense of accomplishment ;satisfaction of psychological needs; the control of impulses and learning to choose judiciously (Sahakian, 1984). Though the above accomplishments are gradual, they should be looked upon to happen at the completion of the learning process and to some extent should be used as the benchmark of any credible learning process.

In the perception of Cross (1981), there is a natural tendency of people to learn and that learning will flourish if nourishing, encouraging environments are provided. This means that adult learners and other potential learners are likely to be drawn to a learning program that provides the right environment. By implication, the intended objectives and goals of the teaching-learning process can only be achieved if the right environment is provided to the learners. In addition to the physical location and appropriateness of the learning facilities, learning environment includes but is not limited to the concern of the teacher, the delivery methodologies employed, the flexibility of the program, and the demands made on the personal life of the student. This particular environment is further enhanced by what Hergenhahn (1988) refers to as *Observational learning*. This type of learning is influenced by four processes namely: attention - seeing a model of behavior and adopting it; retention - putting it on file for future use; behavioral rehearsal - comparing own behavior against model observed and retained and motivation - to act on it (model it) at some future point.

Accordingly, Lindeman's thoughts of as early as 1926 about adult learning are still relevant today. According to Lindeman (1926), adults are motivated to learn as they experience needs and interests that learning will satisfy; therefore, these are the appropriate starting points for

organizing adult learning activities; adults' orientation to learning is life-centered; therefore, the appropriate units for organizing adult learning events are life situations, not subjects. Rarely will adults join and be retained in a learning process that does not have a direct bearing on their needs and interests since adult learning is to a very considerable extent a personal choice and usually high stakes are involved. Consequently, the major emphasis in adult learning is focused more on practice than on academic; on the applied rather than the theoretical; and on skills rather than on knowledge and information (Johnstone *et.al*, 1965). Absence of the above emphasis in any adult education undertaking portends failure of the learning process.

Curriculum content is another determinant for effective adult learning. Unlike children where the teacher decides what is to be learnt and how it shall be learnt, adults decide what they want to learn and how they want to learn it. The “what” here refers to the content in the Curriculum and even though they (adults) are rarely consulted or actively involved in the development of the Curriculum, the onus of the success or failure of the Curriculum is on them since they can easily decide to reject or accept the Content without any further reference to anyone else. When developing Curriculum Content it is imperative to think it through carefully and thoroughly within the content area. Content of any subject or topic is logically interdependent and to understand one part it is important to determine its relationship to other parts of the content under examination. It is impossible to learn something with lasting utility and application by memorization without understanding the connection among and between its component parts. This involves thinking and rationalizing about the component parts and their relationship to one another (Paul, 1996).

The use of diverse teaching approaches and strategies is of great essence to the adult teacher since any negative variance in the teaching process might adversely affect the entire teaching-learning process. One of the most ancient but commendable approach to adult learning is what is popularly known as the Socratic Method. Socratic teaching is centered on giving students questions, not answers, about subjects and/or topics. This creates an inquiring and probing thinking process about a subject, rather than a passive listening and self-selection about entering into a conversation or not.

Questions can be raised on goals and objectives, the nature of a problem or issue, if there is relevant data available to analyse key concepts and ideas, question assumptions, and consider alternative points of view. This leads to new understanding and applications (Paul, 1996). The principles and practices of the Socratic Method appear to have great semblance to what is today referred to as andragogy, the art and science of teaching adults. The effectiveness of this method is borne from the fact that adult psychology recommends the use of enquiry and problem-solving dynamics that are central in dealing with adults, a thing recognized and adopted by both the Socratic and andragogic approaches.

Successful Socratic questioning includes keeping the questions focused; keeping the discussion intellectually responsible; stimulating the discussion with probing questions and periodically summarizing what has and has not been dealt with or resolved. Questioning ability is a science that can be learned and becomes a natural teaching skill with practice. Students are forced to get out from behind restrictive borders and think more deeply into areas that are subject related, extending thinking and problem solving skill.

Commenting on ‘Questioning’, Richard Paul (1996) argues that reasoning goes beyond fact and opinion. It delves deeply into all relevant information and concepts, it distinguishes between opinion and empirically sound information, and it causes the individual to think extensively about an issue, seeking all possible avenues to arriving at a conclusion. The decision of a Judge, for example, is reasoning that includes relevant evidence and valid legal guidelines and findings. Paul further observes that Critical thinking includes three different kinds of questions:-those with one right answer (factual questions); those with better or worse answers (well-reasoned or poorly reasoned answers); and those with as many answers as there are different human preferences (where mere opinion does rule). As noted above the third question requires an opinion, the second calls for reasoned judgment while the first is just plain fact. It should be noted that supporting evidence and solid reasoning is deemed much better in the educational process than accepting something stated as fact as being true without question or probing.

Concerning Curriculum content, Lumb (n.d) advises that Course design should incorporate methods and techniques that include the learner in the learning process. Understanding emerges from inquiry, probing, and looking for relationships among the items of interest. Students should be guided into the routine of analyzing key concepts and ideas, questioning assumptions, and seeking alternative points of view about specific topics or proposals. Forcing students to think more in-depth about something is a challenging and difficult process that requires well-developed instructor skills. The results, however, are most rewarding.

2.3 Adult Teacher Education Training

The quality of the teacher is one determining factor on whether an academic or training program will bear the desired outcomes. No matter how good a curriculum is and irrespective of the degree of preparedness and receptivity of the learner, any shortcoming on the side of the teacher or trainer spells instant doom to the teaching-learning process. In African countries, the departments of adult education are responsible for recruitment of teachers and adult education officers. The recruitment of teachers is carried out at national levels. After recruitment, the adult education teachers are trained by the departments. The teachers are thereafter encouraged to recruit learners and manage the literacy programs in their own villages (Kebathi, 2010). Fordham (2009) noted that the training of adult literacy teachers in African countries should be done before a literacy program starts. This gives them confidence to manage literacy classes. Learner's participation in adult education is voluntary. Nevertheless, participation is influenced by factors such as attitude to learning, priorities for the use of time and the beliefs on the importance of schooling. Titmus (2009) argues that adult education learners who volunteer to enroll in literacy classes are already motivated to learn.

In Kenya, adult teacher education has eleven general objectives namely:-developing theoretical and practical knowledge about the teaching profession; demonstrating the ability to communicate effectively; enhancing the learner's communicative skills; promoting adult learners maximum potential through a variety of creative learning experiences; promoting awareness among adult learners and members of the wider society in regard to their rights and civil duties; creating awareness and promoting appreciation of learners' national and international community; creating awareness among adult learners on the economic opportunities available locally for entrepreneurship and production skills; promoting the

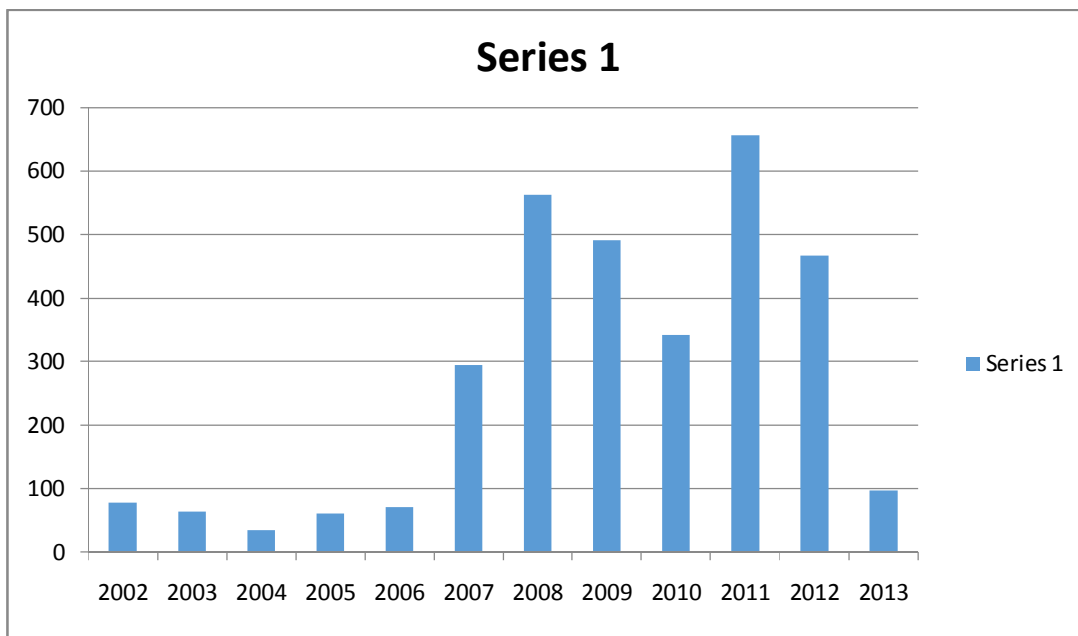
concept and practice of life-long learning; encouraging positive behavior change among adult learners; nurturing positive attitude towards good health and environmental conservation and promoting social responsibility and optimal utilization of resources for sustainable development (Republic of Kenya, 2009). In Kenya, the instructors who facilitate in the adult education and literacy programs are classified into three categories namely; full-time, part-time and self-help (volunteers) depending on their terms of engagement.

In a deliberate effort to build the capacities of the instructors to ensure effective implementation of the adult education and literacy program and improve quality, a total of 3,220 teachers had been trained between 2002 and 2013 as illustrated in Figure 2.3 below. In 2008, the Ministry of Education gave priority to the training of adult education instructors. Thereafter there was a recruitment of 880 new instructors in 2010 who subsequently were trained in 2011. By 2013, a majority of the full time instructors had undertaken the training. However, a careful reading of figure 2.3 shows a dire shortage of the adult education instructors given the fact that the enrolment increased from approximately 215,862 adult learners in 2008 to 241,685 in 2009 then to 300,000 in 2011 and further to 320,000 adult learners in 2012.

The situation is further compounded by the fact that currently there are no training colleges for the adult education instructors. The available training is in the adult certificate and diploma programs offered by the Kenya National Examination Council and some of the public universities. The recommendation that all the primary teachers training colleges include adult training programs for the primary teachers who upon graduation can be able to handle adult learners' programs by the Education for 2015 report is long overdue. This will not only address issues of capacity building but also address the teachers/ instructors shortage

(Education for all 2015 National Review Report: Kenya).Figure 2.3 below shows the Number of Adult Instructors who Passed Certificate Training Course for the 12 years between 2002 and 2013.

Figure 2.3 Number of Adult Instructors who Passed Certificate Training Course 2013



Source: Education for All 2015 National Review Report: Kenya

Notably, though not distinctively referring to adult education teachers, many scholars have pointed to the questionable impact of much teacher training, arguing that working habits acquired by persons who become teachers in the early stages of their own schooling tend to stay with learners to some degree throughout their learning and even teaching careers. The scholars further point out that the hardest element to change and the major challenge facing the profession concerns changing instructional practices towards greater collaborative relationships between teachers and learners. Teaching and learning are what ultimately make a difference in the mind of the learner, and thus affect knowledge, skills, attitudes and the

capacity of young people to contribute to contemporary issues (Republic of Kenya, 2012). This expert observation then begs for action from teacher trainers and policy makers in the adult education sub-sector.

Indeed, and in specific regard to adult education, Ndiku and colleagues (2009) found out that adult learners dropped out due to the instructors' incompetence's. Particularly, some adult education teachers were found to be quite fast in delivery of content. This way, they did not take into consideration individual differences among the learners. Other instructors were reported to be attending school irregularly. Further, the study revealed that a big fraction of the teachers were unable to improvise teaching as well as learning materials and/ or resources whenever there was a shortage. Adult teacher education training thus becomes the core of adult education curriculum and in effect the one ingredient that can make or break curriculum implementation of the adult basic education and training.

In his study on adult teacher education, Muya (2013) found that the teachers were recruited from varying academic backgrounds ranging from Kenya Certificates of Primary Education (KCPE) through Kenya Certificate of Secondary Education (KCSE) to Kenya Advanced Certificate of Education (KACE). It was also found out that the adult education teachers' training was not structured to suit their varying educational backgrounds. The training content was the same for all of them. The training which took the form of induction (pre-service), in service and correspondence course (Correspondence Course Unit -CCU) was found to be piecemeal, haphazardly organized, irrelevant and far-between which did not amount to professional training. Face-to-face advisory visits by the district adult education officers and divisional assistant adult education officers were found to be rare and in some cases non-existent. Financial and physical facilities were also found to be inadequate.

Educational materials were hardly available to the teachers. Morale at work was found to be low for both the teachers and their assistant adult education officers.

However, Muya's findings on the Adult Teacher Education Curriculum aspect appear not to be backed by the present scenario surrounding the Adult Basic education Curriculum. As it is today in Kenya, the development process of adult teacher education Curriculum is fully funded by the State Department of Education through the Ministry of Education. The present ABET Curriculum has its origin in the critical findings of the Kenya adult literacy survey carried out in 2006 that revealed that an average 38.5% of the Kenyan adult population is illiterate. Since this provided a major challenge as the country strove to achieve vision 2030, the Government decided to act. Consequently, and in response to such concerns, the Kenya Government through its Ministry of Education, brought together the then Kenya Institute of Education (KIE) now Kenya Institute of Curriculum Development (KICD), the Kenya Education Management institute (KEMI) formerly known as the Kenya Education Staff Institute (KESI), the Directorate of Adult Education (DAE), teachers from various institutions, college tutors and others to develop the ABET syllabuses.

It was this highly formidable team in terms of expertise, skill and knowledge that re-organized and enriched the adult education curriculum that has been developed way back in 1989. In order to ensure smooth transition and progression of adult learners to either education or/and training, the adult education curriculum was developed under three levels namely: adult education and training levels 1, 2 and 3 (ABET I, II and III) (See Appendix II). ABET II and III curriculum comprise both academic and skills training based subjects. The academic subjects include; English, Kiswahili, Mathematics, Social studies and Science.

The skills training subjects are; Agriculture, Business Studies and Homecare and Craft (Republic of Kenya, 2007).

2.3.1 Implementation Practices of Adult Education Programs

Across human services and education, implementation frameworks and best practices are emerging and becoming better understood. Major reviews of the literature (Friedman & Wallace, 2005; Bate & Kyriakidou, 2004) and assessments of best practices (Aladjem & Borman, 2006; Blase, Naom & Wallace, 2005; Mariano & DeMartini, 2006) have helped to clarify the implementation component of the equation. The Syntheses of current knowledge have produced quantum leaps forward in understanding of curriculum implementation (Mariano & DeMartini, 2006). Curriculum implementation has three critical areas: implementation stages, implementation drivers, and implementation teams.

2.3.2 Implementation stages

Activities over time are required to learn about and make good use of effective education practices. These activities can be done purposefully, efficiently, and effectively to produce consistent and reliable outcomes for students or they can be done haphazardly with inconsistent and unreliable outcomes for students (Blasé, 2005). Most educators are familiar with the activities that comprise the Exploration Stage of implementation. Formal or informal needs surveys are done to help determine the most pressing unfulfilled educational needs of students. Teachers and administrators attend meetings and read materials to learn about education innovations and other resources that might fulfill the needs. Teams of individuals are developed to study the problems and potential solutions and to recommend a course of action (Fixsen, 2001). Glennan and colleagues (2001) holds that from an implementation point of view, it is important to have a clear view of the needs, understanding and buy in for

the potential solutions, and agreed upon ways to assess progress toward improving student outcomes.

It is equally important to develop a clear view of how the agreed-upon intervention will be implemented. The Installation Stage can be a surprise to some (Barber & Fullan, 2005). Deciding to use an innovation is just the beginning. The next stage is to gather the resources needed to use the innovation as intended. People, space, scheduling time and activities, development of materials, selection and initial training of teachers and staff, discussions with parents and stakeholders, which require time and thoughtful preparation (Grigg, Daane, Jin & Campbell, 2003). Planning during the Exploration Stage to take the time for preparations during the Installation Stage is essential. Adequate preparation is a critical first step to help any innovation get off to a good start in the busy life of teachers, staff, and administrators.

The Initial Implementation Stage begins when teachers and staff first begin to use an innovation in their interactions with students. Innovations, by definition, represent new ways of educating students. Teachers are not comfortable or confident at first and students may react to the changes in undesirable or unintended ways. Given their discomfort with the new ways of education, teachers and staff may decide to modify the innovation to make it tolerable or simply retreat to the old and familiar ways of teaching. It is at this point that many innovations fail to be used as intended and, consequently, are not as effective as intended (Balas & Boren, 2000). However, a detailed discussion on teaching methodologies is presented on section 2.6 of this work.

The Full Implementation Stage is reached when half or more of all the teachers and staff are using the innovation as intended and are realizing the intended student outcomes. After a year

or two of full implementation, the innovation is no longer an “innovation”. The innovation and the implementation supports for the innovation have become standard practice in the education setting (Joyce & Showers, 2002). The goal of consistently using the innovation as intended and reliably producing intended student benefits is being achieved year after year, from one cohort of teachers and students to the next. Without the systematic use of implementation science and best practices, the best data available suggest that only 14% of innovations or evidence-based practices reach Full Implementation and that process often requires about 17 years (Balas & Boren, 2000).

2.3.3 Implementation Drivers

Setting higher standards for student achievement makes sense only if teachers, staff, and education environments are equipped to meet those standards. According to the 2015 report on Education for all, in Kenya most adult education centers do not have adequate teaching and learning materials. The problem is acute in the basic literacy program, which requires that most of the materials used either are in mother tongue or in the language widely used in the catchment area. The materials are therefore in most cases, learner generated and not popular with the commercial publishers. Inadequate funding makes this situation even worse.

Further, ACE programs face acute shortage of appropriate and suitable infrastructure. Some of the programs are still offered in churches, mosques, social halls, and under trees especially in the ASAL and Semi-Arid Areas. In some cases the learning environments are not learner friendly as some use inappropriate equipment and furniture, especially in instances where the learners use the lower-primary furniture which are not conducive for adult learners (Kenya Education for all Report, 2015).

This state of affairs sets the stage for many of the failures that are experienced by the Curriculum implementers in the adult education sector. Elmore (2002), Barber and Fullan (2005) make the case for developing the capacity of education systems to support teachers and staff so they can make full and effective innovations to markedly improve student achievement. Implementation Drivers are multi-level supports for the uses of innovations in education environments. There are three integrated and interactive sets of implementation drivers to develop and sustain staff competencies, establish hospitable organizational environments, and assure effective leadership. Given that innovations represent new ways of work, those new ways of work must be learned and used in interactions with students. Regular assessments of teacher performance provide an indication of the extent to which each teacher is using the innovation as intended.

More importantly, the results of the teacher performance assessments are used to assess the effectiveness of the implementation supports for teachers and staff (Grigg, Daane, Jin & Campbell, 2003). If teacher performance is below expectations, the focus is on strengthening the processes for selecting, training, and coaching teachers to use the innovation. This is a critical distinction. One teacher impacts learning for 25 students. One coach impacts 6 teachers and (indirectly) 150 students. Thus, getting the Competency Drivers right can significantly magnify the outcomes of any innovation.

The Competency Drivers cannot function well or for very long without changes in the organization (school, district) to support the new ways of work for teachers and to support the functions of Implementation teams at the different levels. Ready access to data on the effectiveness of the Competency Drivers and student outcomes helps to guide decisions about staffing, schedules, resource allocation, and interactions with families, stakeholders, and

system officials (Hattie, 2009). The Organization Drivers support effective interventions and effective implementation practices. Leadership is critical to the overall enterprise of education at all levels – classrooms, buildings, districts, regions, State systems, and Federal departments. Some problems are more technical and call for more managerial solutions.

Other issues lack agreement about the nature of the problem or an approach to a solution and call for more adaptive leadership. In general, organizations including learning institutions are over managed and under led. Part of the role of an Implementation team is to help leaders acquire the skills required for the full range of problems facing education (National Commission on Adult Literacy, 2008). Kutner and colleagues (2007) assert that adaptive leadership is especially critical for managing the change process as innovations are implemented fully in education environments. If the Competency Drivers are fully supported by Organization Drivers and kept on track with Leadership Drivers, then teachers and staff, routinely meet the performance criteria and reliably produce intended outcomes for students. This is true in education and across the full spectrum of human services as well as in business, manufacturing, and so on. Effective implementation is effective implementation wherever innovations are tried (Vernezet *et al.*, 2006).

2.3.4 Implementation Teams

Teachers and staff do the work of educating students. Implementation Teams do the work of supporting teachers, staff, and administrators. Raising standards for teachers requires establishing implementation teams to support improved teacher performance and improved student outcomes. Implementation Teams consist of three or more individuals with considerable expertise in operationalizing innovations, implementation best practices, and the uses of a variety of improvement cycles for practices, programs, and systems. Individuals

with this expertise work in Teams. Barber and Fullan (2005) critically argue that unlike individuals who come and go, teams can be self-sustaining and too hasten to add “self-propagating” hence increasing the human resource for the task at hand.

Implementation Teams help to carry out the myriad activities involved in the Implementation Stages and they assure the uses of effective practices for each of the Implementation Drivers. Implementation Teams at building, district, and regional levels form an integrated infrastructure to support the full and effective uses of a variety of innovations and evidence-based programs in education environments across a State. With the systematic use of implementation science and best practices, the best data available suggest that about 80% of innovations or evidence-based practices reach full Implementation and that process requires about 3 years.(Fixsenet.al., 2001).

2.3.5 Accessibility of adult education

While there are many barriers to learning, this study shall deliberately deal with barriers of accessibility since for effective curriculum implementation, accessibility has to be realized first. Once barriers are identified, an even bigger challenge, and the challenge facing most institutions today is how to overcome barriers of accessibility towards adult learning. Accessibility in traditional education is a disadvantage for working adults. Barriers relating to accessibility include time, flexibility, and instructional methods. A notable difference between traditional and non-traditional students is their use of time. Most adult learners have families and full-time jobs or other engagements that compete for their time. The flexibility or inflexibility of schedules and difficult access to locations, program duration, and other prerequisites of learning make success in adult education and learning difficult. Lastly, adults learn differently than children, yet the instructional methods in the classroom often times do not reflect the difference (Kemp & Collins, 2008).

While it is hard to control what outside obligations adult learners may have, continuing adult education programs can make classes available at a variety of times in a variety of ways to make it less of a competition to obligations that already exist. Services, including admission, academic and financial aid advising, registration, and the bookstore should be available at times convenient to adults as well as traditional students. In addition, the duration of the academic program provides significant inflexibilities (Fisher, 2004). It is not uncommon for a two-year program to take upwards of five years (Krashen, 2004). Continuing adult education programs could work to create shorter-duration programs or checkpoints with intermediate credentials throughout the ABET programs. Pre-program assessment is also important. It is hard to design a program that does not take into account the entry-level knowledge and understanding of participants (Bourdoncle, 1991). In addition, many working adults enroll in ABET programs that can improve their career and income potential only to find that they lack basic skills necessary to take even introductory ABET subjects.

Unable to take classes that brought them to the adult education center, adults can get frustrated and give up. By assessing the general entry-level knowledge of participants, continuing adult education programs can make the process to complete the initial ABET subjects easier, as well as provide assessment results to instructors to help with curriculum design, all while assessing the adults' readiness to learn (Arthur, 2009). Lastly, instruction in adult classes needs to be readdressed. The learning experience should be problem-centered, relevant to the learners personal goals, integrate information with what is already known, and wherever possible account for learning style differences (Fisher, 2004). Adults learn best through methods and techniques that use experience. There should be a move in adult education away from the transmittal techniques of lecture and assigned reading toward the

action-learning techniques of community projects, case method and critical incident process, discussion, simulation exercises, and the like (Anderson, 2000).

Adult learning is said to be the most expensive category of education in the world (Bynner & Parsons, 2009). Especially with a struggling economy, cost is a big issue for adult learners as well as what types of assistance exists to combat the cost of institutional learning. Current patterns of financial aid and institutional funding reinforce the disadvantages that face adult learners. Most financial-aid programs are designed with full-time students and especially children in mind. Basically, federal student aid is financial assistance that is available through the department of Education's Office of Federal Student Aid (Bynner & Parsons, 2009). For federal financial aid, one must be enrolled or accepted for enrolment as a regular student working toward a degree or certificate in an eligible program and most federal grants cannot be used for non-credit courses. Most federal education loans are only available to students attending half time or more (Arthur, 2009). With a few exceptions, Federal Pell Grants are available only to undergraduate students leave alone the basic adult education and training learner!

Continuing adult education programs have an opportunity to act as an advocate on behalf of the non-traditional student in making fundamental changes to offer more direct assistance to adults. In addition, providers of adult basic education and training programs must look within their own institutions. Lack of flexibility in institutional policies regarding payment options for adult students demonstrates the lack of focus on those who do not meet the institutional definition of an ordinary student as opposed to the adult learner (Anderson, 2000). Often times, payments must be made in full before students can register for a new learning session. On average, that gives adult students two to three months to pay their student bill. Already

having other financial obligations, payment options are discouraging. The principles of adult learning can be applied in terms of institutional and societal change (Fisher, 2004).

Accountability in traditional and conventional education favours enrolment of traditional students. Accountability measures are intended to provide meaningful ways to assess program quality and to help institutions and systems improve by identifying strengths and weaknesses. Most accountability discussions and measures centre on traditional full-time students, even though adult basic and training education outcomes are weaker for adult learners and are indeed much more needy (Fisher, 2004). Little information exists to answer adult learner questions about employment outcomes, earnings potential or return on education investment when choosing a career or vocation to pursue in the adult education centers. Since students, both traditional and non-traditional are the primary consumers of education in general, unlike adult education learners prospective formal school and college students utilize a variety of commercial products when evaluating what institution to attend. This sets the stage for outright disadvantage of the adult learner in all other future decisions concerning their education, a thing that ultimately affects their desired destiny or goal in life.

Most consumer information about conventional education focuses on traditional student needs. College guides such as Africa news and World Report annual publication and African best colleges present comparative data about individual institutions. Publications include information on everything from academic offerings to campus social life, target traditional students looking for a full-time college experience. Nowhere, is there any mention of adult students and their efforts to further their education! No commercial products geared for adult learners exist (Bourdoncle, 1991). Ultimately and upon completion of the ABET education cycle, a good number of adults may want college grade education and degrees of

unquestioned quality, the same as traditional students but they are rarely offered such an opportunity by most of the existing education systems and practices. The challenge then is for adult education providers and governments to design a clear path that can make the regular university program easily available to adults. By putting andragogy in practice, the goals and purposes for the learning aspect of adult education programs can begin to address the issue of accountability through institutional change. Continuing higher education programs need to collect and record data relating to enrolment, progress and completion rates as well as earning outcomes that capture adult learners' economic gains (Obura & Rodgers, 2008). The future success of continuing higher education depends on the history of the program.

The data collected, in some cases, may not be a ringing endorsement for adult education programs. Regardless, conventional education programs need to make that information accessible to both current and prospective adult students. On the institutional level, records can be used for marketing or for recruitment or to show the administration there is a need for additional resources. Adult education practitioners in education institutions often struggle with institutional constraints regarding not only adult students but also policy, staffing and resources (Arthur, 2009). This information can be used to make necessary the changes to improve adult education programs. Continuing education organizations should work at the state and regional level to create a database of adult education programs. This process may be slow moving, but it is a necessary step to overcome barriers of accessibility. These changes can be related back to Knowles' developmental goals and purposes in relation to institutional and societal growth.

Adult education in Kenya is managed under the ministry of education as an adult and continuing education (ACE) program. The ACE program is meant to improve literacy levels

(reading and writing skills) as well as numerical skills. Adult education has been touted as a key factor towards achieving vision 2030 goals. It will also play an important part in the struggle against poverty in general. Efforts have been made to improve the relevance of the adult education program in Kenya (Kebathi, 2010). Still it faces challenges that limit its accessibility. The program suffers from minimal funding which cannot be able to sustain its operations. The program mostly depends on money from donors. Adult and continuing education programs are generally viewed as poor education for poor people. It is not given a priority and thus lacks proper policy to push its agenda forward. Lack of or poor infrastructure makes it harder for those most in need of adult education to access the service. In most rural areas where a large percentage of illiterate people are, there are poor road networks as well as few and far between adult education centers. This makes accessibility of this program difficult. In addition, there are few trainers who are well qualified to offer adult education teaching services (Karani, 2006).

2.3.6 Role of management in implementation

Day and Bamford (1998) argue that management programs for adults learning vary widely in size and scope. Some are large, multilevel programs, such as the Arlington Education and Employment. Programs can be found in community colleges, public school systems, community centres, corrections facilities, and workplaces. They can be faith-based, for profit (proprietary), managed by local education agencies, or community supported (Curtis & Kruidenier, 2005).

According to Karani (1996), management administrators in these programs are also diverse in their experience and training. While some may be managers by profession, others may have no previous experience in program administration. In the latter category are many experienced teachers of learners who have moved into program management. Others may

have managed, or are managing, literacy, or other types of programs and have added an adult education as a second skill component to their existing responsibilities. This brief addresses the needs of administrators with these varied backgrounds. It begins by outlining fundamental responsibilities of adult education administrators. It then describes components of typical programs serving adult learners and includes resources and tools that can facilitate successful administration of program components (Fisher, 2004).

The work of management administrators of programs serving adult education learners is multifaceted. In addition to implementing the program's vision and goals, determining progress and success in meeting those goals, and managing financial and policy requirements, administrators of adult programs need to have knowledge of second language acquisition, research-based instructional approaches with this population, and the daily realities and needs of teachers and learners. According to Kemp and Collins (2008), some administrators may also be teachers in their own programs and need to juggle two roles. For administrators of programs large and small, the literature on program management consistently describes the responsibilities of administrators to include successfully implementing program components and playing a leadership role that involves ensuring the program's financial viability (Curtis & Kruidenier, 2005).

Standards for Adult Education Programs give information about program components, standards for achieving them, and ways to assess the extent to which they are in place (Anderson, 2000). There are further discussions of these components and electronic tools that can be used in program review. The following program components are discussed here: Knowledge of adult learners and second language acquisition processes, learner recruitment, intake, and orientation, Assessment of learner needs and progress, learner retention and

transition, learner support services, curriculum and instruction, staffing and employment conditions, staff professional development supervision, evaluation, and support (Shin, 2001).

According to Day and Bamford (1998) learner retention, or persistence, is the extent to which learners remain with the program, both within their course and through the subsequent classes and levels that are offered. A number of factors affect adult learner retention, including availability of classes that meet the needs of learners who may be juggling multiple job and family responsibilities; availability of child care; and links to opportunities beyond the program such as personal, education, and career counseling. At the Genesis center in Rhode Island, potential learners are given a simple yes/no questionnaire that asks them to gauge for themselves whether they can commit to the class schedule and requirements at the present time (Krashen, 2004).

Transition involves moving beyond the program to other educational and vocational opportunities, to college and university (Anderson, 2000), or to workplace training and work (Bourdoncle, 1991). In assisting adult learners in their transition to other educational and vocational environments, program administrators need to help them connect with a variety of student academic and career support services, including college preparation courses, financing options for higher education, job-training programs, and local job fairs (Fisher, 2004). Program administrators need to collaborate with service providers in the community to create access to other needed services, including healthcare e.g., through connections with community health and other social service organizations, childcare e.g., through access to day care providers and after-school childcare programs, or through providing childcare within the program, and academic support services e.g., computers and other technology; libraries; academic advising; supplemental instruction, including tutoring help outside the classroom;

study groups; test accommodations; counseling; and advising; and self-study resources (Krashen, 2004).

Day and Bamford (1998) argue that a curriculum is the complete course of study offered by a program. It may include statements about not only skills and content knowledge to be gained, but also about social competencies, life skills, and desired outcomes. Crucially, a curriculum informs the selection of materials e.g., textbooks and the choice of instructional activities. Having the students purchase their own textbooks has been cited as a factor that contributes to persistence as students feel they have a stake in their education and also the ability to study on their own (Lewis, 2009). Curriculum is constantly changing, since it is the tangible result of ongoing processes that include conducting needs assessments, setting goals and objectives, identifying program beliefs regarding language learning, organizing individual courses, and evaluating outcomes and feedback (Krashen, 2004). Content standards for adult learning programs can guide curriculum development. An administrator can lead program staff in carrying out the necessary processes and in creating a dynamic curriculum that responds to student needs and conforms to the standards of the field. Quality instruction reflects principles of adult learning and language acquisition and is guided by the program's curriculum (Curtis & Kruidenier, 2005).

2.3.7 Enrolment Trends and Progression of Adult Education Programs (AEP)

According to a recent report from the United States Government Education Accountability Office (GOA), the largest growing segment of adult education enrolment is in adult learning programs (Titmus, 2009). In a 2002 report entitled participating trends and patterns in adult education: 1991-1999, Bynner and Parsons (2009) indicate that enrolment in adult educational programs increased significantly in practically every category of adults surveyed.

Enrolment numbers for adults participating in organized formal educational programs increased from 38 percent in 1991 to 46 percent in 1999 (Shin, 2001) and continues to grow. In today's society, adult learning ability affects multiple aspects of adult life such as workforce participation. As immigrant populations grow, the demand for adult learning programs will only increase. The following paragraphs explore the general findings of the Government Education Accountability Office report.

The 2009 report released by the American government education accountability office indicates the number of American adults speaking English very well grew by 21.8 percent between 2000 and 2007. State officials are reporting increased demand for English language programs, especially at the community based level. The federal funding helps to support several programs in health and human services. For example, education and labour reinforce language learning in preparation for other objectives. However, minimal research and lack of coordination among agencies may be impeding significant progress in developing successful programs. Part of the problem is that adult learning is part of so many other programs that it cannot be statistically separated for comparison purposes. Another factor that hinders development of successful programs is the lack of communication between federal, state, and privately funded organizations. To further complicate the matter many community-based organizations (CBOs), being privately funded, do not report enrolment statistics to federal agencies. This is a significant issue because the study indicates adult learners represent the largest percentage of learners attending classes sponsored by community-based organizations (CBOs). Coordination of research and curricula standardization among federal, state, and privately funded organizations may increase the potential for more successful English learning programs (Arthur, 2009).

Adults learn differently and have different reasons for learning than children. The term andragogy was first used by Alexander Kapp in 1833, but it was Malcolm Knowles who began developing a theory and principles of andragogy in 1968. The first assumption of adult learning theory states that adult learners “need to know why they need to learn something before they undertake to learn it (Shin, 2001). Many factors affect why adults seek education. Education is the subject matter that will make a positive contribution to the individual's life. It is of utmost importance and is most likely to be sought by the learner. In Africa, proficiency in the adult learning significantly affects social, civic, and workforce participation. The highest numbers of adults with limited learning proficiency are concentrated in most African states. The greatest percentage of enrolled adult learners is in the lowest or beginner levels of proficiency. Both state and local (CBO) organizations predict that enrolment will grow exponentially if it keeps pace with the demand created by population growth (Titmus, 2009).

Enrolment in adult education programs has increased significantly since 2000. Adult learning programs have the highest enrolment compared to all surveyed education programs. Government agencies are conducting research to determine how better to meet growing demands. However, the sheer numbers of programs that include some form of adult learning make it difficult to determine the genuine need. In addition, the lack of coordination between government and private institutions impede the development of more successful programs. The 2009 Government Education Accountability Office report findings suggest the need for adult learning programs will continue to grow. As individuals immigrate to the United States for better opportunities, they will naturally seek out ways to improve their standard of living and provide for their families. Education in adult learners specifically will be of most benefit in their situations. To build a strong productive society, government and civic organizations

must provide the tools individuals need to be successful. Institutions and organizations that provide adult learning programs will be better able to meet the needs of the growing demand by coordinating with each other (Obura & Rodgers, 2008).

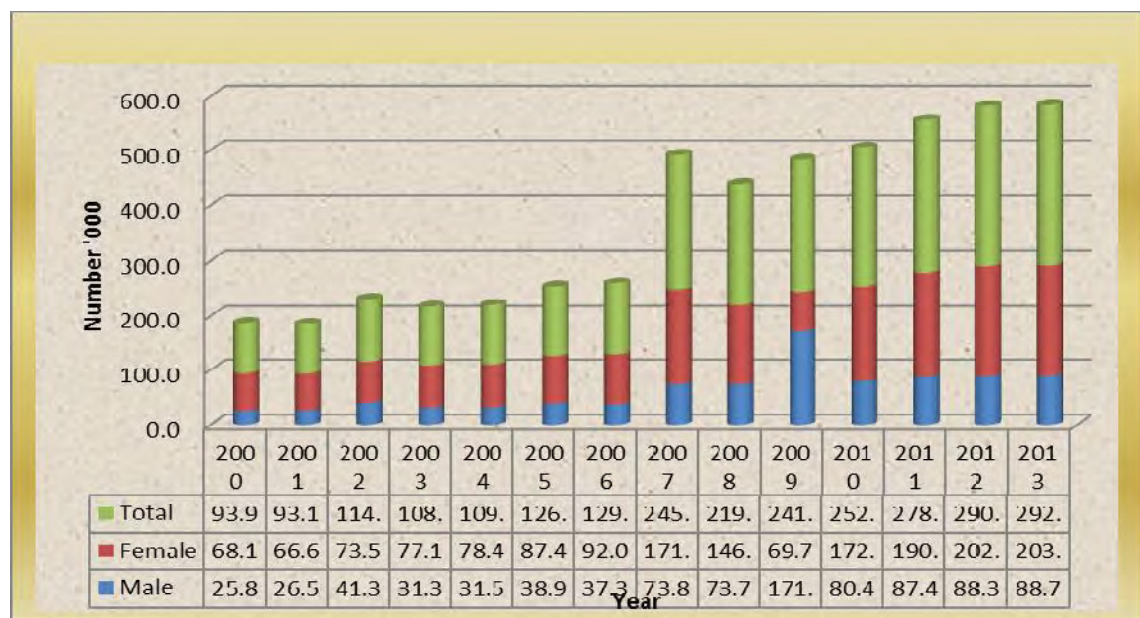
In her infancy as a nation, Kenya through her founding father, the late Jomo Kenyatta, identified ignorance, diseases and poverty as the major hindrance to development therefore all efforts were directed to the eradication of these hindrances to development (Karani, 2006). *Elimu ya Ngumbaru* (adult education) was introduced to improve literacy levels hence eradicating ignorance especially in the adult population. At that time, AE was under the Ministry of Culture and Social Services. Today AE, apart from its original aim of teaching basic literacy skill also aims at incorporating appropriate skills to enable the adult face the challenging environment more confidently. It is worth noting that adults have immense challenges in accessing education. In Kenya, the Department of Adult Education in the Ministry of Culture and Social Services is the body charged with the responsibility of spearheading the campaign for the elimination of illiteracy and promotion of adult education for national development. Since independence, the level of literacy has risen from 30 per cent to 44 per cent for males (1992) and from 10 per cent to 60 per cent (1992) for females. Adult education in Kenya includes all forms of organized education and training that meet basic learning needs of adults. It includes literacy and numeracy instruction as well as general knowledge, skills, values and attitudes that adults require to survive, develop their capacity, live and work in dignity (Kebathi, 2010).

In Kenya, adult education covers people aged 15 and above and the basic aim is to provide literacy and survival skills to youths and older people who may have missed out on formal education. The need to provide adult education was recognized after independence. In 1979,

the Department of Adult Education was established to spearhead a national literacy program that led to recruitment of adult education teachers and officers and establishment of literacy class centers in most parts of the country. The Government has also developed a post-literacy curriculum and an accelerated curriculum for those wishing to re-enter the formal system of education (Karani, 2006).

The Medium Term Plan for Kenya's Vision 2030 recognizes the need to have literate citizens and had set a target of increasing the adult literacy rate from the 61.5 per cent in 2007 to 80 per cent by 2012. However, this target was and may never be achieved in the near future if some radical measures to foster enrolment are not put in place. The fact that the enrolment increased from approximately 215,862 adult learners in 2008 to 241,685 in 2009 then to 300,000 in 2011 and further to 320,000 adult learners in 2012 (as shown in figure 2:2 below) does very little to address the 38% illiteracy rate facing the country at present (Republic of Kenya, 2012).

Figure 2.4 Enrolments of ACE Learners, 2000-2013



Source: Education for All 2015 National Review Report: Kenya

While there might be a number of reasons why the enrolment tripled between 2008 and 2012, the increase can mainly be attributed to the Kenya Education Sector Support Program (2005-2010) interventions especially the giving of community support grants to ACE centers. The prudent use of these grants assisted in improving the learning facilities and purchase of learning teaching materials.

2.3.8 Program Implementation Practices and their Relationship to Enrolment to Adult Education Programs

Bringing the adult student to the core of enrolment strategy in adult education programs is essential if education institutions are to meet enrolment expectations on a limited budget. The integration of adult students in a learner-centered environment illuminates traditional barriers and opens dialogue on how best to serve the needs of these learners. Strategic enrolment management (SEM) offers one approach to meeting these needs while supporting integration. Enrolment management in adult education is maturing into a highly sophisticated management strategy driven by economics, as well as an increased demand for measurable accountability. Strategic enrolment management (SEM) as a component of strategic planning is goal oriented and is designed to integrate academic and administrative functions as shared responsibilities (Kemp and Collins, 2008). Applying the principles of Strategic enrolment management (SEM) with a learner-centered focus establishes a culture of engagement that intentionally addresses the goals of access, persistence and success. Strategic enrolment management (SEM) in effect tips the admission funnel upside down, as it focuses on relationship building from prospect to degree attainment.

An integrated approach typically includes marketing and recruitment, admissions and financial aid, student support services, and retention management, as well as academic services. Decentralized, fragmented management gives way to comprehensive, institution-wide strategies that integrate roles and functions, bridging academic and administrative structures with a common philosophy and goal-centered, learner-centric approaches. In addition, strategic enrolment management (SEM) is metrics driven and therefore able to provide data sets to specific to adult students. (Krashen, 2004).

According to (Lewis, 2009) the quality of relationships characterizes the SEM model, reflecting the partnership between the adult students and adult education. The emphasis on relationship building as a shared responsibility results in a learner-centred culture. When students have positive relationships with faculty mentors and staff advocates, they are more likely to succeed (Flint, 2005). Academic advisors serve as the linchpin to an integrated approach and play a primary role in student success. The Oklahoma State University System, an early pioneer in enrolment management, illustrates the shift to a team approach in fostering student success. Focusing its initial efforts on quality improvement strategies to reduce waste and decrease transaction times, the Oklahoma System expanded the role of enrolment management from an admissions function to an institutional strategy that blended academic and administrative roles and functions.

This served to create a sense of team, encouraged collaborative review and the redefining of processes, while fostering deliberate rather than reactive approaches to student support issues, and built a data-rich environment to support institutional decision-making. As a result, Oklahoma has had a steady increase in enrolments since 2007, with 89 percent of its graduates remaining in the state's workforce upon degree completion. Singled out as a

national model by Complete College America (CCA) in 2011, the State has set a goal of increasing the number of degrees and certificates earned annually from 30,500 to 50,900 by 2023, a 67 percent increase. Oklahoma's emerging success underscores the capacity of a strategic enrolment approach to transform institutional practices aimed at achieving enrolment, persistence, and attainment goals (Bynner & Parsons, 2009).

Strategic enrolment management provides a vehicle for measuring adult learners' retention and degree completion rates, identifying the key causes of attrition, and evaluating the effectiveness of initiatives focused on increasing adult learners' access, persistence, and attainment. A recent survey of adult education institutions of all types underscores the longstanding need to provide a comprehensive framework for measuring adult learners' completion rates. As a matter of fact, 77 per cent of the respondents did not know completion rates for their adult students. Only 16 per cent reported that they had a good understanding of the key reasons for these learners not completing credentials. With such significant gaps in data, adult education institutions, policy makers, and state systems are likely to make uninformed decisions that negatively impact both access and attainment of student progress requirements pose a number of challenges unique to the adult student. Readiness, credit standing, flexibility, and financial need are key factors that limit adult progress to degree. Persistence, time to graduate from the program, and measurable success can be greatly enhanced with focused attention to these needs. (Hazoume, 1997).

Many adult learners come to learning institutions with high expectations but may not be institutional ready (Obura & Rodgers, 2008). Often they are confounded by difficulties navigating institutional policies and procedures and do not know where to turn for help. These and other factors impact time to complete the program. For students who lack the skills

needed for academic success, developmental education programs can provide valuable pathways to success. For learners in transition who have earned adult academic credit or who have credit worthy experience, their standing regarding credit transfer is important. Adult education plans that outline course requirements, schedules, and options help students navigate a path to high-level academic attainment.

Educational financing options may expand or limit access and progress to adult education. The rate of progress to adult education from traditional developmental programs has historically been very low. Almost 60 percent of students entering the nation's community adult learning institutions require some form of remediation. Only about 15 percent of these students continue on to advanced-level work in one year and still fewer complete a post-secondary credential (Bourdoncle, 1991). State and national data on the high costs of remediation and low rate of adult student success have focused attention on the re-engineering of remedial education, with many states building data systems to track the number and percentage of developmental students that transition to adult education courses and earn an academic credential (Krashen, 2004).

According to Bynner and Parsons (2009) as an incentive to successful completion, some states are increasing reimbursement rates for community adult institutions to offer wrap-around support services along with revamped instructional practices that integrate literacy and career training. More states are moving toward performance-based funding incentives linking the successful transition of students in developmental adult education courses to credential attainment (Smith, 2011). Adults participating in Washington State's Integrated Basic Education Skills Training (I-BEST) initiative, which provides college credit for courses

focused on both literacy skills and career knowledge, are more likely to persist and earn college credit than those learners in traditional adult basic literacy and ESL programs.

Programs that have adapted the I-BEST model demonstrate similar outcomes, such as Minnesota's *FastTRAC*, a modular program that provides incremental credentialing or stacking and allows students to step out and return without incurring entry delays or processing barriers. Eighty-eight percent of the participants completed the integrated courses compared to 25 percent in traditional courses. These programs help adults gain the knowledge and skills sought by employers while earning transferable college-level credits. Programs are mapped within career specific fields, giving students a clear understanding of where they are going and how to get there. The credentialing is progressive so students can stack credentials and build their competence in a career field or advance to a degree (Lewis, 2009).

In Kenya, the challenges that have affected Adult Education programs over the years include the absence of an all-inclusive Adult Education management programs and framework, poor strategic planning, lack of trained literacy and adult education teachers, a high turnover of staff and volunteer teachers, limited resource allocations and infrastructure. Although the Government established the Directorate of Adult and Continuing Education to coordinate the relevant programs, it has not been adequately resourced (Karani, 2006). As a result, access to adult education programs are low whilst gender disparities are high. Adult education is affected by a negative image. The lack of efficient management framework, teaching and learning materials, the application of appropriate quality assurance mechanisms, and without coordinated service delivery, leaves the sub-sector in need of major reform and resourcing. A

further issue concerns the transition of adult learners from primary to secondary education and the appropriateness of the curriculum (Kebathi, 2010).

2.3.9 Universal Policies on Adult Education Programs in the World

According to Anderson (2000), most countries in the world recognize the significance of education for social transformation. During the last decade, two major changes have taken place in most African countries education system, which have far-reaching implications for education. The Constitutional Amendment in India Act (2002) makes free and compulsory education a justifiable fundamental right for all children in the age group 6-14 years. It guarantees eight years of elementary education to each and every child in the country. However, the focus of Constitutional amendments in education is primarily on elementary education of children (6-14 years), and not on adult education and lifelong learning for youth or adults.

The underlying assumption is that universal elementary education among children (6-14 years) will automatically tackle the problem of adult illiteracy. Hardly any efforts are made to justify adult literacy being a part of the Constitutional provisions and guarantees. The right of the vast population of non-literate youth and adults for basic literacy education and learning has remained invisible in the government policy. The new legislation will have far-reaching consequences for the provision of adult non-formal education for women as well as the roles and responsibilities of central government, state government and local bodies in governance of non-formal education, and adult education (Fisher, 2004).

Bynner and Parsons (2009) had a critical observation that the jurisdiction of the Minister of Education in making national policy is set out in the National Education Policy Act No. 27 of

1996. The Minister has the power to determine education policy in accordance with the Constitution [subject to provision in section 3(1) and (4)], and to determine national policy in all areas of planning, provisioning, financing, staffing, co-ordination, management, governance, programming, monitoring and evaluation and the well-being of the education system.

This means that in developing policy for the systemic provision of ABET, the Minister is specifically responsible for education management information systems, including the provision of data in accordance with international obligations of government organization, management and governance of the system facilities, finance and development plans, including advice to the Financial and Fiscal Commission innovation, research and development the ratio between educators and students the professional education and accreditation of educators the minimum numbers of hours per day and days per year during which ABET shall be provided for different phases of education in education institutions curriculum frameworks, learning programs, learning standards, examinations and the certification of qualifications subject to the provisions of any law establishing a national qualification framework or certifying or accrediting body language in education co-operation between the Department and other state departments, provincial education departments, local government, and non-governmental organizations (Kemp & Collins, 2008).

The National Education Policy Act of 1996 also outlines a number of Directive Principles which would shape the nature of ABET provision. It would need to advance and protect fundamental human rights, in particular the right of every person to basic education and equal access to education institutions and the right of every student to be instructed in the language of his or her choice where this reasonable and practicable. Furthermore, ABET should

contribute to the full personal development of each student, and to the moral, social, cultural, political, and economic development of the nation at large, including the advancement of democracy, human rights and the peaceful resolution of disputes (Bynner & Parsons, 2009).

The Directive Principles stress the need to achieve equitable education opportunities and redress for past inequality of education provision; this includes the promotion of gender equality, the advancement of the status of women, and endeavoring to ensure that no person is denied the opportunity to receive an education to the maximum of his/her ability. As a result of physical disability the Directive Principles stated in the Act are the encouragement of lifelong learning; achieving an integrated approach to education and training within the National Qualifications Framework; cultivating skills, disciplines and capacities necessary for reconstruction and development; recognizing the aptitudes, abilities, interests, prior knowledge and experience of learners; encouraging independent and critical thought; enhancing the quality of education and educational innovation through systematic research and the development of education; monitoring and evaluating education provision and performance; training educators and education managers; achieving close co-operation between the national and provincial governments on matters which include the development of capacity in the provincial (Krashen, 2004).

According to Bourdoncle (1991), the department of education commits itself to interpreting the constitutional guarantee to basic education in terms of an open learning approach. In this regard it cites the following principles of good educational practice which should inform all initiatives in adult education and training: learner centeredness lifelong learning flexibility of learning provision the removal of barriers to access learning the recognition of prior learning

and experience the provision of learner support, and the maintenance of rigorous quality assurance over the design of learning materials and support systems.

The Kenya National Adult Literacy Survey (KNALS, 2007), revealed that only 61.5% of the adult population has attained minimum literacy level, leaving 38.5% (7.8 million) adults illiterate. It also revealed that only 29.6% of the Kenyan adult population has attained desired literacy competences. About 29.9% of the youth aged 15 to 19 years and 49% of adults aged 45 to 49 years are illiterate. The survey further revealed high regional and gender disparities in literacy achievement, with Nairobi recording a high of 87.1% and North Eastern province recording the lowest at 8%. The Medium-Term Plan for Kenya Vision 2030 recognizes the need to have literate citizens and sets the target of increasing the adult literacy rate from the current 61.5% to 80% by 2012 and hence the need for expanding provision of adult education across counties and also make it more relevant to the needs of the learner (Kebathi, 2010).

In Kenya, the main issues facing the adult education sector have been challenges of access, equity, quality, relevance and efficiency in the management of adult educational resources. In addition, there is limited capacity to cater for the growing demand for access to adult education. Further, there is mis-match between skills acquired by adult students and the demands of industry, rigid admission criteria that restricts credit transfers between adult learning institutions and students and gender and regional disparities. The Government has embarked on a series of reforms to address these challenges and meet the demands of the Kenya Vision 2030 in adult education policies. It is important to implement sustainable micro and macro-economic policies that aim at elimination of poverty, stimulate growth of the economy and ensure resource redistribution. High-performance enterprises that demand high

skilled labour while creating quality employment opportunities to absorb graduates from formal and technical adult education and training programs are essential (Karani, 2006).

It is necessary to create a sustained economic growth trend devoid of political and economic shocks that promote industrialization and sustained development. There is need to also create a conducive environment for high technology adaptation and innovation; and address adult education objectives on improving access, participation and progression while eliminating inequalities; ensuring relevance and efficiency and effectiveness in education service delivery. In Kenya, the vision for the education and training sector is to provide a globally competitive quality education, training and research for sustainable development. Therefore, adult education and training will play a key role in the attainment of Vision 2030. Apart from reducing illiteracy, the sector trains and provides human resources; an ingredient in the economic, social and political development of any society. Under the Vision 2030, adult education and training will provide required knowledge, skills and attitudes to many adults necessary to drive the initiatives set in the pillars. On the economic pillar, education and training will play a fundamental role in the training of adequate and highly skilled human capital to support the sector growth (Krashen, 2004).

2.3.10 Legal Framework and Policies on Adult Basic Education and Training

For almost half a century, various documents, including reports of Commissions of Inquiry, Working Committees/parties and Sessional Papers have been significant to influencing the development of adult basic education and training in Kenya. First was the Board of Adult Education Act of 1966 that established the Board of Adult Education (BAE) to coordinate, regulate and advise on the promotion of adult education and literacy programs. The repeal of the Board of Adult Education Act and the enactment of the Basic Education Act, (2013)

ushered in the Fifth Schedule that established the Special Board of Adult and Continuing Education (SBACE) to advise the Cabinet Secretary with respect to coordination and regulation of all adult and continuing education providers in Kenya.

Earlier on, the National Committee on Educational Objectives of 1976 had underlined the need for life-long learning and continuing education to enhance productive capacities of all Kenyans. Following closely was the Sessional Paper No. 6 of 1988 that enunciated the objectives of adult education and called for renewed commitment to the eradication of illiteracy. Early in the Millennium, in came the Poverty Reduction Strategy Paper (2001-2003), Economic Recovery Strategy for Wealth and Employment Creation (2003-2007) and the National Poverty Eradication Strategy 1997-2010 that recognized and highlighted the important role played by education for adults in human resource development. Further, it recognized adult education as a key determinant of earnings and an important strategy for poverty reduction and economic recovery (Republic of Kenya, 2015).

The Sessional Paper No.1 of 2005 on “A Policy Framework for Education Training and Research” recognized adult education and literacy program as a vehicle for transformation and empowerment of individuals and society. Two years down the line, the Kenya National Adult Literacy Survey (KNALS, 2007) made recommendations for the strengthening of adult education and literacy programs through enhanced funding, adequate professional personnel, provision of teaching & learning materials and quality assurance services. In the same year, the Gender Policy in Education (2007) underlined the need for equity by increasing participation of illiterate adults, especially women and out-of-school youth in the adult education and literacy programs. In 2009, the Alternative Provision for Basic Education and

Training Policy (2009) gave guidelines for the provision of education to the youth and adults in ASAL and disadvantaged regions.

The Constitution of Kenya, 2010 Articles; 43(1) f, reiterated education as a right for all people; 54 (b) – providing for the access to education for persons with disability; 55(a)- recommending access to relevant education and training for the youth; and 56 – providing for affirmative action programs for special groups. In recent times, the Sessional Paper No. 14 of 2012 stipulated the government’s commitment to provide quality ACE and APBET services, programs, and opportunities for life-long learning. Finally, two years ago, the Education Sector Policy on Peace Education (2014) recognized literacy as an important enabler of peace (Republic of Kenya, 2015).

2.4 Constraints of Adult Learners on the Implementation of Adult Basic Education and Training Curriculum

According to Kroger (1989), people tend to define themselves and others in comparison terms, to judge themselves according to some standards or to see themselves as better or less privileged than others. They often think that they do not live up to the required standards and this might lead to a low self-esteem. Some respond to this inadequacy with depression, anger and social withdrawal while others accept their situation as it is. Defining a situation as critical, for example, is to shape whatever solutions are possible to members of that world. For instance, in using reference group theory, members of certain groups will be sensitive to issues they believe are important to them. On the other hand, if adults are convinced that the learning activity is not relevant to their issues at hand, their behaviours will reflect an indifference to that activity.

In this line, Olufunke (2013) avers that the perception of adult education and its value has varied greatly among individuals and groups. Some people view adult education only from the perspective of the old aged adult learning only to both read and write. People will have good perception of adult education programs, if they are timely, relevant and innovative and if these programs reflect practical/ real life situation. Appearing to read from the same script, Wanyama (2014) submit that adult education programs are associated with failures that could not access formal education hence many current and potential adult learners have a low opinion of the programs. The presupposition here then is, since majority of people view adult basic education and training programs as inferior compared to formal education and by implication as a sign of degrading oneself, deliberate efforts need to be made to educate people on the importance and need for adult education.

The observations of Rice (2012) and Haihambo (2006) show that in most African countries, people still believe in their traditions and continue to react along stereotyped gender lines. This observation is widely experienced in adult education programs in Uganda where the majority of the participants are women. This affects the way men think and since the majority of the participants are women, some men easily connect what is learnt in such programs as women activities.

Murphy and colleagues (2002) suggest that lack of qualifications and self-confidence may lead to non-participation. People who lack confidence will always not contribute in a discussion and this might make them give up saying that they cannot manage learning. This normally happens in adult education programmes where learners of different educational backgrounds are put to learn in the same class. Those with little educational background might feel insecure to participate in class. While it has been suggested that adults should be

grouped in classes according to their educational backgrounds in order to enhance readiness to learn, this has in many cases been said but practically not done.

2.5 Constraints Affecting Adult Education Managers on their Understanding of their Role in Curriculum Implementation.

The influence of the senior management team in schools, due to such practices as the intense targeting and monitoring of managers outweighs all others in the role set. It is argued that the core values which guide educational institutional practices are directly linked to the management team's drive to generate income and meet targets (Gleeson & Knights, 2008). The changing role of the institutional head and other members of the senior management team have, by the inclusion of tasks previously undertaken by the local authority, directly affected the role of curriculum managers. As Gleeson and Shain (2009) point out, managers comply either willingly or strategically with new practices within schools. Further McTavish (2007) and Briggs (2003) suggest that in practical terms this has led curriculum middle managers to spend more and more of their working day dealing with tasks linked to income generation, accountability and administration, than tasks relating to the pedagogical needs of their area, a situation that in a sense ignores needs of their area. A situation that Gleeson and Knights (2008) argue has led to reluctance by teaching staff to take on managerial roles. Schools have learned to be more business-like, and their business is learning.

Government sponsored functional literature has been produced which sets out management standards and discusses their application. Indeed, there have been investigations of, and proposals for, management training in Further Education. All of these serve to clarify the pertinent issues and enable the Government to steer on the purpose and management of the learning business. In the argument of Ofsted (2005), management within education matters

because so many learners use education and recognize that a coherent provision in a local area depends on an effectively functioning sector if all learners are to have access to suitable opportunities. The significant suggestion is that the quality of leadership and strategic management tends to be weak where hierarchical structures constrain the amount of leadership managers and staff can show, leaders and managers do not analyse data on learner outcomes systematically enough in order to judge how well learners are doing. More often than not, leaders and managers place too much emphasis on supporting learners and teachers, and not enough on challenging them to aim higher and to achieve more. Leaders and managers get bogged down in bureaucratic processes, often associated with finance, contract compliance or estates, and do not focus enough on raising attainment and improving quality (Ofsted, 2008). Briggs (2003) not only appears to recognize the dual identity aspect of the role of middle manager, that is academic colleague and line-manager, but also identifies the downward flow of authority or power, which ultimately affects their ability to lead.

While there are a number of factors that clearly affect the curriculum middle managers' ability to lead, there is little doubt that leadership is an important characteristic of their role (Gleeson & Knights, 2008; Briggs, 2003). This being the case, it becomes important to understand the practical inter-play of leadership with management, especially as it relates to the everyday role and tasks that curriculum middle managers perform (Briggs, 2003; Wise; 2009). Fullan (1991) argues that leadership relates to mission, direction and inspiration, whereas, management involves designing and carrying out plans, getting things done and working with people. This view is supported by Hales (2003) who avers that since management is, *inter-alia*, the management of other people, so a critical, if not defining, management task is that of influencing or modifying the behaviour of others. One of the most important elements of the role of the curriculum middle manager is working with and through

others to achieve organizational goals; particularly relating to income generation (McTavish, 2007).

Lambert (1972) posited that the managers have the role of the development and carrying out of school policy; the formulation of department policy and aims and objectives for the department, the preparation of the syllabus and its regular review ,sole responsibility for the syllabus, and the annual review of the syllabus. In connection with curriculum development, the role-functions identified were the development of new curricula and teaching techniques, keeping abreast of contemporary developments; and the organization of educational visits and visiting speakers. Lambert (1972) suggests that the administrative functions of managers in curriculum involves choice and care of textbooks, apparatus and materials, stock and audio-visual aids; with the deployment of teaching staff and ancillaries. Among the sundry functions in this category are such matters as testing, timetable, safety, records and reports. Bennett (2005) argues that middle managers should be concerned with spreading the vision and delivering it in practice in the wide range of classroom and other activities.

McTavish (2007) sees power as an integral part of educational management at all levels, a mechanism to get others to do what is wanted of them, even if it is against their will. Power in this case can be expressed in terms of control over others, as a way to modify and bring about the perceived change in behaviour. However, while the use of power in this way is sometimes valuable for challenging existing values and cultures within organizations, it has limited use in the long term as sustained use often results in falling morale and even greater resistance to the changes managements are putting forward. In this line of thought, if middle managers are to fulfill their implementation role successfully, they clearly need a degree of empowerment to implement policy and change (Richards, 2007).

2.6 Methodological Constraints on the Implementation of Adult Basic Education Curriculum

Instructional materials provide the focus for classroom learning as well as the knowledge and skill units of the curriculum (Mezirow, 1991). The instructional materials must be built around a coherent approach to teaching basic skills, contain sufficient material, cover content of interest to the participants, employ a large type size, and have an appropriate number of words on a page (Pratt, 2008). With a good set of materials, teachers and participants can still work out a way to learn even if teacher training has been insufficient. To ensure that the materials are well designed, program staff must field test and revise them several times to ensure that they are serving the needs of participants (Brundage & MacKeracher, 1980). Each field test requires a full class cycle, usually a year. The complete development of a set of effective literacy materials can take two or three years. During the first year, the number of participants served must be kept low so that the materials development staff can focus on identifying strengths and weaknesses. After the first year, the program can serve a larger number of participants while refining the materials (Cross, 1981).

2.6.1 Pedagogy

Pedagogy itself is a contested term, but involves activities that evoke changes in the learner: According to Bernstein, pedagogy 'is a sustained process whereby somebody(s) acquires new forms or develops existing forms of conduct, knowledge, practice and criteria from somebody(s) or something deemed to be an appropriate provider and evaluator' (Bernstein, 2000).

Teaching practices are the specific actions and discourse that take place within a lesson and that physically enact the approach and strategy. Taking a cue from Alexander's (2001), teaching practices comprise teacher spoken discourse (including instruction, explanation, metaphor, questioning, responding, elaboration and management talk); visual representation (using a chalkboard, writing, diagrams, pictures, textbook, learning aids such as stones, experiments, drama) to understand or construct the new knowledge being presented or indicated to the learners; the act of setting or providing tasks for learners to cognitively engage with new content or develop physical skills, such as experimentation, reading, writing, drawing, mapping, rehearsing, problem solving, practicing a variety of social interactions, in which language is central between learners or learners and teacher such as pairs, groups, individually or whole-class; teachers' monitoring, use of feedback, intervention, remediation and formative and summative assessment of the students or assessment by the students.

The ultimate goal of any pedagogy is to develop student learning, and yet the 2005 Global Monitoring Report on quality (UNESCO, 2005) includes creative, emotional and social development as indicators of quality learning. In order to include a wide number of studies on pedagogy, the review has conceptualized 'effective' pedagogy as those teaching and learning activities which make some observable change in students, leading to greater engagement and understanding and/or a measureable impact on student learning. Implicit in these definitions is a starting point or baseline with which to contrast the observable change in behaviour or learning taking place as a result of a teacher's pedagogy.

An alternative term we could have used in this review is that of 'quality', referring not merely to school, national or international student examinations or assessments but also to the quality

of the human interaction in the classroom through appropriate pedagogy, including freedom from corporal punishment (Alexander, 2008; Barrett *et al.*, 2007; Moreno, 2005; Barrow, *et al.*, 2007; Tikly, 2011; UNESCO, 2005). Within this latter understanding, equity of learning is seen as an essential indicator of quality (Leu & Price-Rom, 2006; Price-Rom & Sainazarov, 2010). ‘Quality’, however, can be seen as looking at the relationship between school inputs, such as quantitative surveys of textbooks and other physical school resources and student achievement, but studies focusing on these range from showing ‘significant positive associations’ (Barrett *et al.*, 2007) to others which state that ‘there are no clear and systematic relationships between key inputs and student performance’ (Barrett *et al.*, 2007).

Alternatively, other studies see quality as encompassing the more complex pedagogical issue of the way resources are used in teaching and learning that affects students’ achievement (Alexander 2007; Barrett *et al.*, 2007; Somerset, 2011). On a larger scale, education systems and international monitoring bodies, including the Global Monitoring Report (GMR), are increasingly using assessments or tests of cognitive achievement as proxies for learning outcomes and therefore quality of education. International surveys such as PIRLS, PISA and PASEC are widely used as measures of academic achievement, as well as local and national examinations. Pre-PIRLs are being increasingly used in developing countries at primary levels, and with the plans for a single reference point for measuring learning in developing countries from UNESCO’s Learning Metric Task Force after 2015 (UNESCO, 2013), such international indicators will have a far greater reach and influence within developing countries.

In contrast, Alexander (2008) argues that for ‘national accounts of quality to have a distinctively national and indeed local slant’. He distinguishes indicators of quality from

measures, recognising that there are non-measurable indicators that may be culturally or contextually specific but difficult to gauge by objective measurements. Bearing Alexander's warning in mind here, 'effective' teachers' pedagogic practices in this review are broadly interpreted and seen in the outcomes they engender. Measurements of enhanced student cognition are significant, but other indicators are included, such as changes in student confidence, participation or values, and social indicators such as teacher-student interaction and inclusion. Secondary outcomes of successful learning as a result of effective teacher pedagogic practice may be higher student attendance, use of resources, use of specific practices and stakeholder satisfaction, such as parents and community members (Orr *et al.*, 2013).

2.6.2 Andragogy

Originally formulated in 1833 by a German teacher Alexander Kapp, the term andragogy was used to describe elements of Plato's education theory (Nottingham Andragogy Group 1983). Andragogy is derived from two root Greek words *andr-* meaning 'man' and can be contrasted with pedagogy *paid-* meaning 'child' and *agogos* meaning 'leading' (Davenport, 1993). Even though Kapp's use of andragogy had some currency, it fell into disuse due to the dispute and controversy surrounding the use of the term. Andragogy however reappeared in 1921 in a report by Rosenstock in which he argued that 'adult education required special teachers, methods and philosophy. Notably, Rosenstock used the term andragogy to refer collectively to these special requirements' (Nottingham Andragogy Group, 1983).

However, Knowles (1984, 1988& 1990) expounded the concept of andragogy by looking at several assumptions about adult learners and how these assumptions compare to the pedagogical model. Adults need to know why they need to learn something; how the learning

is going to benefit them and what the consequences are if they do not learn it. The teachers' role moves from director of all activities to one of facilitator, a partnership between the teacher and the adult learner without the formal status differentiation. The learning climate is one that is safe and accepting where the adults feel accepted, supported, and respected (Knowles, 1988). Readiness to learn and motivation are other key hallmarks of adult education. Knowles submitted that adults become ready to learn when they understand why they need to know or do something and have a life-centered orientation. Adults are motivated to learn when they see the learning will help solve a problem they are currently facing. Adults are motivated by external factors such as promotions and better jobs, but the most potent motivators are internal motivators such as self-esteem, quality of life, or increased job satisfaction (Knowles, 1990).

2.6.3 Geragogy and or Eldergogy

The boundary between Geragogy, Eldergogy and Metagogy as adult teaching methods is rather thin. However, since each concept has already an identity, it's important to carefully scrutinize each of them. Simply defined, the terms Geragogy and Eldergogy refer to the art and science of teaching the elderly.

Although the concept of older adult education was propounded by Comenius in Czechia as early as the 16th century, the term "Geragogy" only achieved prominence after appearing in Lebel's (1978) article in *"Lifelong learning: The adult years"*. Lebel was the first writer to advocate the term "Geragogy" as a description of an educational theory for older learners. Some years later, Yeo (1982) advanced the term "Eldergogy" without, unfortunately, developing any educational theory. A fuller attempt at expanding the notion of Geragogy emerged in John's *"Teaching and loving the elderly"* (1983) and *"Geragogy: A theory for*

teaching the elderly” (1988). John’s approach, however, is distinctly a “top-bottom” one where teachers are responsible for meeting older adults’ need for stimulation.

Teachers, for instance, are expected to assign homework that – amongst other tasks – request learners to measure pens and pill bottles, and name body parts. Recent years witnessed other attempts at developing and expanding the concept of Geragogy. For instance, a number of academics (Baringer *et al.*, 2004; Peterson 1983; Van Wynen 2001), researching older adult learning, turned their attention to how practioners in the field may facilitate the smooth transition of older adults back into a classroom setting after an absence of sometimes more than five decades. Baringer and colleagues (2004) pointed out that older adults returning to the classroom generally face a challenge to their independence and control, since to them individuals grow to be independent in life, but as adults return to the classroom, they may fall back on the educational experience of their youth.

Additionally, Wlodkowski (2008) reports that older adults thrive in learning experiences where there is a positive rapport between teacher and learner, as this setting provides a feeling of social inclusion that generates much motivation and enthusiasm and a sense of community. Moreover, if course material is to be successful in engaging older learners’ imagination, it must be presented in a way that reflects the “real world,” which is very popular with older learners, rather than some abstract component, (Peterson, 1983). Keeping in mind that older adults tend to suffer from visual problems as well as other general health issues, older learners develop a preference for auditory rather than visual learning (van Wynen, 2001).

As far as teaching styles are concerned, the consensus is that peer teaching is the most effective method in late-life learning. Peer teaching is a learner-centered activity because members of educational communities plan and facilitate learning opportunities for one another. Peers will plan and facilitate courses of study and be able to learn from the planning and facilitation of other members of the community: “Peer teaching is a rare and provocative model of education in which, in the morning, a person may teach a class for her peers, and that same afternoon have one of her students become her teacher” (Brady *et. al.*, 2003, p. 853). Recently, there was an emergent body of literature focusing on peer teaching in Lifelong Learning Institutes (Erickson 2009). Originally called Institutes for Learning in Retirement, Lifelong Learning Institutes constitute college and university-based programs that arose in the United States of America during the mid-1970s to organise learning opportunities for older persons (Findsen & Formosa, 2011).

An early study by Clark and colleagues (1997) examined 42 course moderators and their perceived roles, and found that a moderator who was overly didactic risked causing passivity among the learners. Brady and colleagues (2003) work reported several distinct challenges such as managing the wide range of older students’ educational backgrounds and reasons for attending, adjusting to learners’ physical deficits associated with aging, such as hearing, vision, or memory loss, and perhaps the most fundamental challenge, determining a mission for teaching.

Nevertheless, surveys clearly indicated that the peer teaching experience is an overwhelmingly positive one, with peer teachers noting many rewards such as personal satisfaction and intellectual stimulation (Simson et al., 2001). Studies also examined several peer-teaching methods that ranged from group discussion to a mixed-method approach in

which teachers employed a combination of approaches they deemed appropriate. Brady and colleagues (2003) report that a mixed-method approach is the most frequently employed strategy among peer teachers because it allows them to be more flexible and responsive to the needs of older learners. Without doubt, the extensive character of literature focusing on Geragogy is promising since older adults are overlooked in mainstream discussions on teaching strategies. However, this corpus of literature has been taken to task for its lack of critical imagination (Formosa 2002, 2005). Most writings perceive older people as a relatively homogenous group, embrace the psychological deficit model of older adult learning, and assume that any type of education improves the quality of life of older persons.

Moreover, one finds no attempt to problematize the fact that late-life education is driven largely by middle-class notions of what constitutes education. Indeed, only exceptional articles adopted a critical lens towards the geragogical field that asks: whose interests are really being served? Who controls the learning process? Why is education “good” for people? How is the quality of life enhanced by education? Seeking a response to these enquiries, critical educators embarked on a quest to develop a rationale as well as a practice-oriented front for older adult learning that is sympathetic to the constraints of social structure and that accepts that the educational process occurs within particular social, economic, and political contexts. This issue is the subject of the following section.

2.6.4 Metagogy

Metagogy, is a science and art of adult learning that employs a collaborative approach and borrows heavily from Pedagogy, Andragogy and even Geragogy and Eldergogy. Metagogy is taken from the word ‘meta’ meaning ‘beyond’ or ‘through’ (Epstein, 1999). Taken, literally metagogy means beyond the leader or beyond the teacher. Current and historical models of

teaching, while well-researched and well-intended, too often leave the teacher with a haunted wanting (Brookfield, 2000) and treat the student as a product to be consumed (Pratt, 1998), rather than a potential to be actualized. Creativity is too often not celebrated in such efforts; rather out of fear, it is discouraged (Amabile, 1988). Human potential suffers as creativity is dismissed or is threatened by the ruthless metrics of failure.

To engage effectively, a Second Tier perspective is to follow what Cook-Sather (2002) calls a “change in mindset [that] authorizes student perspectives” (p. 3) in the potentiating and learning partnership. Learner-centered and integrally based attitudes and environments can effectively provide space for the creative way of being for both the potentiator and the learner, and in the process nurture the growth of human potential within the individual and the community of learning (Weimer, 2002). As a result, creativity coupled with an innate spirituality and a sense of empowerment form an inseparable triad that is foundational to catalytic teaching and therefore to the purposes of metagogy. Collectively this triad forms and represents the enlivening force of metagogy.

Metagogy speaks directly to the nature of creativity, intuition, imagination, play—to spirituality uncommon in today’s learning places and organizations. Due mostly to our Western cultural heritage, evoking the notion of spirituality as a construct directly relevant to the nature of Second Tier teaching and learning can become for some a stumbling block (Tisdell, 2003). Yet metagogy, the teaching to creativity and potential, at its core is spiritual and integral. Therefore, efforts here will be to transform spirituality into a stepping-stone. It can be suggested, and not in a derogatory sense, that it is the first tier prejudices concerning spirituality that get in the way of understanding it in a deeper and more inclusive and universal way (Tisdell, 2003). Too often, spirituality and religion are viewed as inseparable.

However, we must agree with James Moffett (1994), author of *The Universal Schoolhouse*, that while spirituality may well be what all religions have in common, spirituality is not dependent upon or bound by religion. Tisdell (2003) suggests there is no way to avoid concepts like soul, heart, intuition, instincts, a calling, or spirituality when discussing the full actualization of human potential. They simply emerge like they were part of the landscape of our natural teaching and learning ecology. What we find to be true for others and ourselves is that efforts to fully actualize one's greatest potential seem to be accompanied by or spring from spiritual experiences.

Metagogy begins with different assumptions:

1. The usual state of *teaching*, therefore *learning*, is sub-optimal, less than interdependent and therefore disconnected from the typical learner. Where the focus of educational programs and largely educational practice is currently on the content (i.e., teaching to an objective), it could rightly, some suggest should (Shapiro & Levine, 1999; Weimer, 2002), be on the learner (i.e., teaching to a person with his or her own objectives). This state, which can be suggested as more optimal for both learner and teacher, occurs naturally at the intersection of potentials—those of the learner and those of the teacher (the potentiator).
2. Where *teaching* and therefore *learning* may be sub-optimal, this state can be resolved and advanced to optimal via methods that catalyze personal potentials for both teaching and learning.
3. Awareness and reflection lead to sensitivity for the human potentials (Mezirow, 1996) before us, leading towards perhaps the greatest skill required by the potentiator—the ability to learn from and about the very ecologies of the learner (Scott, 2004). In truth, education does not rest beyond that point, but within it.

4. Intentions move away from objective-based education and toward potentiated, mutual growth of the student, the teacher and the community.

Metagogy seeks to inductively catalyze open-ended inquiry in a community of learners in such a way that the synergistic flow of learning inductively discovers and provokes the questions appropriate to reach correspondingly appropriate truths for each community member and thereby for the community as a whole. Catalytic teaching (metagogical inquiry) potentiates “ah-ha!” understandings, stimulating the learner to make a quantum leap (borrowing a term from physics), a stepping straight up (as in from the ground to the top of a picnic table) in moving to a more holistic understanding of a new concept. Once that new understanding is attained, the learners’ perspectives are broadened, clarified, fitting more of the puzzle pieces together. At the same time they become metamotivated to intrinsically reflect on their learning to more fully understand their own potential and to extrinsically share their transformations with others to expand the potential of the collective motivated by homonomy (Boucoulalas, 1988), connected to self-directed/community-motivated selves (Merriam, Caffarella & Baumgartner, 2007). This is neither a push nor a pull, a lift or carry, but an essential relationship of metagogical teaching and learning.

2.7 A Comparison and a Contrast of the Teaching Methodologies

In order to appreciate and grasp the differences, implications, similarities, uniqueness and the practical applications of the various teaching methodologies a comparison would be imperative.

2.7.1 Andragogy and Pedagogy

According to Knowles, the way in which adults learn, andragogy, is different from how children learn, which is referred to as pedagogy. Knowles compared the assumptions about learners in the pedagogical model to those assumptions about adult learners in his andragogical model. The pedagogical model sees a learner as a dependent person who carries out the teacher's direction and becomes ready to learn when the teacher tells the learner when and what to learn. The learner has a subject-centred orientation to learning and is primarily motivated by external factors. In contrast, the andragogical model sees learners as self-directed persons who become ready to learn when they have a need to know or do something. The learner, who is task-centred or problem-centred, is learning in order to be able to solve a problem or perform a task and is motivated by both internal and external motivators (Knowles, 1984). Exploring how older adults learn will begin with a discussion about andragogy, "the art and science of helping adults learn" (Knowles, 1990). According to Knowles, the way in which adults learn, andragogy, is different from how children learn, which is referred to as pedagogy.

Knowles (1984) explained these differences by looking at several assumptions about adult learners and how these assumptions compared to the pedagogical model. The first assumption is about the need to know. Adults need to know why they need to learn something, how the learning is going to benefit them and what the consequences are if they do not learn it. While the pedagogical model assumes learners do not need to know how they will apply learning to their lives, they only need to know that they must learn if they want to pass or get promoted (Baringer *et. al.*, 2004). The self-concept of the learner is the next assumption. Adults see themselves as responsible for their own decisions and self-directing while children are often seen as dependent (Bynner & Parsons, 2009). According to Knowles, the pedagogical model

assigns to the teacher full responsibility for making all decisions about what will be learned, how it will be learned, when it will be learned, and if it has been learned. It is teacher-directed education, leaving to the learner only the submissive role of following a teacher's instructions.

In contrast, the andragogical model makes the assumption that adult learners are responsible for their own actions and are self-directing (Beder & Carrea, 1988). The teachers' role moves from director of all activities to one of facilitator, a partnership between the teacher and the adult learner without the formal status differentiation. The learning climate is one that is safe and accepting where the adults feel accepted, supported, and respected (Knowles, 1990). The role of the learners' experience is also different between the pedagogical and andragogical models.

Adult learners enter learning activities with a greater amount and variety of experiences than children (Bynner & Parsons, 2009). These life experiences provide a valuable resource that should be tapped into. Therefore, various experiential techniques and practical application opportunities allow learners to share and utilize their life experiences to solve problems. These could include group discussion, problem-solving activities, case studies, and scenario based activities (Knowles, 1984). Another difference is found with the readiness to learn. Children typically become ready to learn when they are told they have to learn, while adults become ready to learn when they understand why they need to know or do something (Knowles, 1990). This realization that learning is needed can occur with any change in a person's life such as loss of job, death, divorce, but can also be triggered by demonstrating to the learner why the learning would be beneficial to them (Beder & Carrea, 1988). Orientation

to learning is another difference. Children have a subject-centred orientation to learning while adults have a life-centred orientation (Bynner & Parsons, 2009).

Adults are motivated to learn when they see the learning will help solve a problem they are currently facing. They are task or problem-centred and learn most effectively when learning activities and examples use real-life situations in which they can apply their new learning (Knowles, 1990). How children and adults are motivated is the final difference. Children are typically motivated by external factors such as, teachers, and grades. In contrast, adults' primary motivators are internal motivators. Adults are motivated by external factors such as promotions and better jobs, but the most potent motivators are internal motivators such as self-esteem, quality of life, or increased job satisfaction (Bynner & Parsons, 2009).

2.7.2 Metagogy and Andragogy

Knowles and colleagues (1998) also informs us that in traditional Western European thought adults' learning has been perceived as "a process of mental inquiry" (p. 35), and he also reminds us, correspondingly, that the teaching of adults is a "a process by which the adult learns to become aware of and evaluate his experiences" (p. 39). Experience, he says, comes first and texts and other resources compliment the learning process as the source for constructing knowledge. This andragogical mind-set and approach is at the heart of the new metagogy. No one approach, at the operational level of facilitating the learning process, will address all learners' needs. We have long come to accept this as a fact in our adult education practice.

Depending on the task at hand and the learning styles, needs, and preferences of an adult, the metagogical approach embraces andragogy's original claim for flexibility, "The andragogical

model is a system of elements that can be adopted and adapted in whole or in part. As such, the adult educator ought to be capable to understand her own developmental status at any given point in time and for any particular task in facilitating the learning process, as much as being capable and skilled in selecting flexibly from among a universe of instructional approaches. Therefore, metagogy is inclusive of an andragogical approach. While andragogy is touted as the only approach distinct from conventional educational approaches (or conventional pedagogy), metagogy also includes conventional pedagogical approaches as they are appropriate to a task at hand depending on the context, learner needs or stated goal, or when indicated for a learner as a way to transmit content.

The often-disparaged banking approach to education may also be useful in a given educational, training, or developmental task. When we are transparent about the process of facilitating learning, we can remove oppressive elements of conventional pedagogy. Metagogy is strengthened with knowledge from other professional fields as much as it shares its foundation with the social and behavioural sciences.

Metagogy advocates a both /and attitude within a practice -theory-practice loop. As such, a concept must be theorized, described, and prescribed to be consequently analyzed in order to be readied for application. In addition, it is crucial to understand that one cannot take metagogy or any theory of learning or of education in isolation of the context in which its methods will be put into practice. Practice is, no doubt, influenced by the organizational or communal environment in which it is practiced. These environments typically include very specific systems and structures that are based on an organization's management theory or a community's ideology, for example. These, in turn, influence what the very goal of a

program is to be. With this in mind, the Metagogy Project will explore the philosophical and theoretical contexts and layers with input from educators, students and other stakeholders.

The expansive concept of metagogy embraces pedagogy and andragogy with their respective corresponding, reciprocal roles of the teacher and learner. Moreover, metagogy transcends any particular preferred approach or “best” practice to instructing, learning, and teacher training in order to guide stakeholders in developing and delivering instruction that is appropriate to a task at hand. The goal of a metagogical approach is to collaboratively build capacity in educators and students to address the needs and lead critical developments we all face in the new frontiers of this 21st Century. Once conceived within a Learner–Teacher Spectrum (Strohschen & Elazier, 2005), an expansive approach to a pedagogy for adults, i.e., the new metagogy, ushered in an approach for the preparation and professional development of knowledge workers, or what can be called the multi-dimensional teachers, needed for the education, training, and development demands of the third millennium.

2.7.3 A Critical Review of Adult Teaching Methods

Davenport and Davenport (1985), in their chronicle of the debate, note that andragogy has been classified as a theory of adult education, theory of adult learning, theory of technology of adult learning, method of adult education, technique of adult education, and a set of assumptions. Hartree (1984) questioned whether there was a theory at all, suggesting that perhaps these were just principles of good practice, or descriptions of what the adult learner should be like. Knowles himself came to concur that andragogy is less a theory of adult learning than a model of assumptions about learning or a conceptual framework that serves as a basis for an emergent theory.

The second area on going today, is that of the extent to which the assumption that criticism is a characteristic of adult learners only. Some adults are highly dependent on a teacher for instruction, while some children are independent, self-directed learners. The same is true for motivation; adults may be externally motivated to learn, as in attending training sessions to keep their job, for example, while children may be motivated by curiosity or the internal pleasure of learning. For example, even the most obvious assumption that adults have more and deeper life experiences, may or may not function positively in a learning situation. Indeed, certain life experiences can act as barriers to learning (Merriam, Mott & Lee, 1996).

2.8 Problems Facing Adult Education Officers in Monitoring and Supervision of Adult Basic Education

The central key to effective implementation of any adult education program needs qualified educators at all levels (Lind, 1990). According to Rooth (1979), employment of full-time teachers could be the most important single factor toward curriculum implementation. The need to improve teacher training, working conditions and the professional status of literacy educators is important (UNESCO, 2004). The effectiveness of any curriculum implementation depends on the quality of the personnel involved. The success of any literacy program is largely dependent on the type of teachers recruited (Mwandia, 1972). The implementation of curriculum program largely depends on the facilitators and regular supervision and monitoring they are given. In Kenya, majority of teachers of Kenya curriculum programs have minimum qualifications required. The part-time and self-help (volunteer) teachers are recruited from primary and secondary dropouts. The need for training is very important for effective curriculum implementation program.

In Kenya, the department of Adult Education is responsible for the recruitment of teachers and Adult Education officers. The recruitment is done locally and training done by the department. The teachers are encouraged to enroll and manage the centers in the village. Walden (1975) discourages untrained teachers being used to manage adult literacy classes. It is important to note that facilitators, apart from some attending induction and correspondence, low-cost material production and weekend seminars, it is important that they get training from recognized institutions. This will aid them attain both academic and professional competence which will attract adult learners. Knowledge attained will aid them handle centers professionally, that is, know their students and type of learning activities that appeal to them. Lack of confidence in teachers make learners look down upon them. The part-time teachers mainly drawn from primary schools training find it difficult to change from child-oriented approach when teaching adults. The young and inexperienced adult teachers are not effective facilitators to adult learners who are much older than they are. Fordman and colleagues (1995) advocate for training of adult literacy teachers before the start of literacy program to boost their confidence and motivate learners to learn. Failure to offer training leads to the failure of literacy programs.

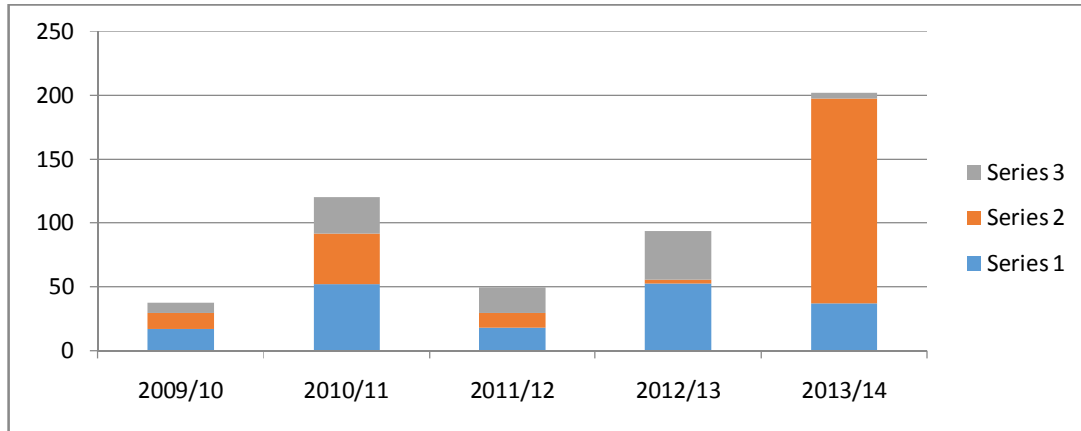
For instance, in Thailand, functional literacy and family planning project teachers were not well trained for the implementation of more non-formal curriculum. This led to poor and andragogical method used, hence, led to not achieving the objectives. In Botswana, literacy teachers were recruited from primary seven school leavers in the 1990s. Due to low level of education, the program did not meet its demands. Even more importantly, teachers with good training and adequate experience have strong classroom management skills, make good instructors and produce better students. Mwirira (1993) has indicated that Kenya adult literacy teachers are poorly remunerated; hence, they cannot meet physiological needs of

their families. There is a vacuum on the schemes of service for the professionally trained persons.

According to the 2015 Education for All 2015 National Review Report, in Kenya, the coordination, supervision, monitoring and evaluation of adult education programs is mainly hampered by inadequate personnel to implement the program and lack of means of transport. Recruitment of new personnel has been restricted through government embargo on recruitments. Due to lack of adequate monitoring and evaluation of the program, it compromises on quality and standards in program implementation. (Kenya Education for All National Review Report, 2015). Adult education officers therefore routinely find themselves unable to ensure the implementation of the program and failure is imminent.

Notably, the challenges faced by Adult education officers in coordination, supervision, monitoring and evaluation are largely caused by inadequate funding of Adult Education programs by the Kenya Government. According to the 2015 Education for All 2015 National Review Report, the adult education sector is the least funded of all the other basic education sectors in education like Pre-Primary, Primary and Secondary education as evidenced by figures 2.5 and 2.6 below. As a matter of fact, the Adult and Continuing Education (ACE) program's recurrent and development expenditure budgets as a percentage of the Ministry of Education budget are shown in the Figure 2.5 below. The total budget for the ACE expenditure as a percentage of total budgets of the Ministry of Education between 2011 and 2013 ranged from 0.75 percent and 2.19 percent. This shows gross under funding for the adult education and literacy programs.

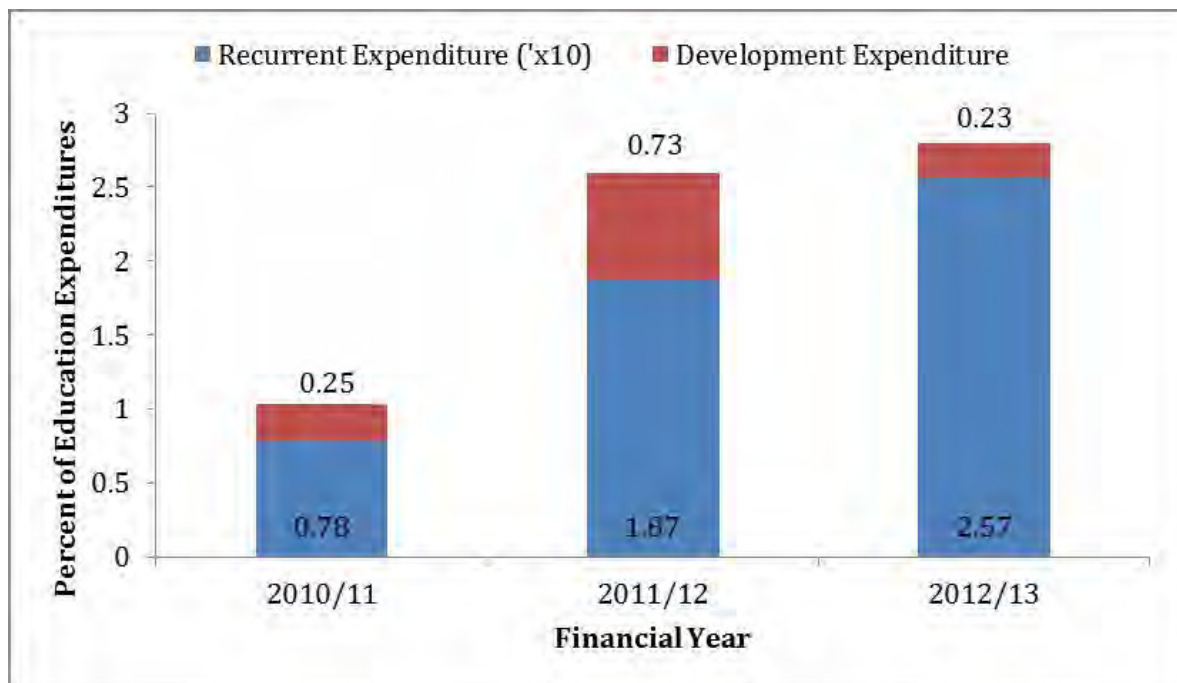
Figure 2.5 Expenditures in Basic Education Development, 2009-2013



Source: Education for All 2015 National Review Report: Kenya

Figure 2.6 Analysis of approved estimates and actual expenditure by ACE (in Kshs)

Million for the 2010/11 to 2013/13 financial year



Source: Education for All 2015 National Review Report: Kenya

2.9 Theoretical Framework

The five theories that guided this study were; Adult learning theory, Mezirow's Theory of Perspective Transformation, Systems Theory, Reference Group Theory and Gross, Giacquinta and Bernstein (1971) theory of implementing Curriculum innovations.

2.9.1 Adult learning theory

Adult learning theory can trace its philosophical roots back to the experiential learning philosophy of John Dewey (Tweedell, 2000). Dewey's (1948) philosophy of newer education stressed the importance of experience in the learning process, the participation of the learner in the learning process, and the importance of perceiving learning as a lifelong process. There is no point in the philosophy of education which is sounder than its emphasis upon the importance of the participation of the learner in the formation of the purposes which direct his activities in the learning process (Dewey, 1948). The idea that education was related to the whole of life's experiences, and that the educational experience required active participation of the learner, was quite radical for the time (Weimer, 2002; Tweedell, 2000).

The concepts of self-directed learning, andragogy, and perspective transformation, have been critical to the development of adult learning theory (Merriam, 1993). Two educational theorists were products of Dewey's laboratory school for the Department of Education: Cyril Houle and Malcolm Knowles, and the ideas of both have framed the discussion around adult educational theory (Tweedell, 2000). Houle's research, which was a qualitative study of individuals participating in various types of learning, resulted in a typology of the adult learner. Houle identified three subgroups of learners: adults who are goal oriented, adults who are activity oriented, and adults who are learning oriented (Houle, 1961). Goal oriented

learners are out to accomplish some identifiable objective, such as a degree or certification. Activity oriented learners are those who participate in learning for another reason unrelated to knowledge acquisition: to socialize, to find a spouse, to escape an unpleasant home life. Learning oriented learners are those who seek knowledge for its own sake. Houle's research was significant to the development of the concept of self-directed learning, a concept that has helped define learning in adulthood (Merriam, 1993; Tweedell, 2000). It was also significant to the development of the idea that all persons had a desire to learn, a rather radical thought for its time (Griffith, 2006).

Heavily influenced by Knowles' (1968) concept of andragogy versus pedagogy that is, adult learning versus child learning, is widely accepted as a seminal work in the field. The concept of andragogy had been evolving in Europe for some time, and was further refined by Knowles (1984). Andragogy, the art and science of teaching adults, is contrasted with pedagogy, the art and science of teaching children (Knowles, 1984). In the former, the learning experience is driven by the learner; in the latter, the learning experience is driven by the teacher. Andragogy is based upon five assumptions of adult learning: maturity moves one to more self-direction; experience is a rich resource for learning; learning readiness is closely related to the developmental tasks of the adult's social role; adults are more problem centered than subject centered in their learning; and adults are motivated by internal rather than external factors (Knowles, 1968; Merriam & Caffarella, 1999; Gillen, 2005).

The assumptions posited by Knowles have been the subject of much debate, a frequent criticism being that Knowles was more descriptive than analytical in presenting his ideas and that andragogy is perhaps his own ideological exposition (Jarvis, Holford & Griffin, 2003). In spite of widespread acceptance for the assumptions of andragogy, there has been little

empirical research to test the validity of the assumptions, or to predict adult learning (Merriam & Caffarella, 1999; Merriam, 1993). Although first published as a learning theory (1968), Knowles later acknowledged that the andragogical model was based on a set of assumptions, rather than on a theory (Knowles, 1984). Knowles also later recognized that pedagogy-andragogy represents a continuum ranging from teacher-directed to student directed learning, and that both approaches are appropriate with children and adults, depending on the situation (Merriam, 1993).

This theory is relevant to this specific study since it brings out the various types of adults' learners, that is, those who are goal oriented, adults who are activity oriented, and adults who are learning oriented. Inversely, it brings out the perceptions of adult learners which determine the effectiveness with which adult curriculum will be implemented.

2.9.2 Mezirow's Theory of Perspective Transformation

The concept of perspective transformation is informed largely by the field of cognitive psychology. Two major themes in cognitive development are particularly informative: dialectical thinking and contextual thinking. Dialectical thinking allows for the acceptance of alternative truths or ways of thinking about the many contradictions and paradoxes that we face in everyday life (Merriam & Caffarella, 1999). Adult students also think within the contextual frames of social, cultural, political, and economic forces. Mezirow's (1990) theory of perspective transformation was significant in informing adult cognitive process. Attaching critical reflection and an awareness of why we attach meaning to reality is a hallmark of adult learning. Uncritically assimilated meaning perspectives, which determine what, how, and why we learn, may be transformed through critical reflection. Reflection on one's own

premises can lead to transformational learning (Mezirow, 1990). Transformational learning means reassessing one's perspectives or correcting distorted assumptions (Merriam, 1993).

Three perspectives widening the lens through which we define adult education include sociology, critical theory, and the feminist perspective (Merriam, 1993; Tweedle, 2000). The psychological perspective has been predominant in the past. More recently, however, we are beginning to develop a more holistic perspective of adults within the context of their culture and society. Significant information from this perspective reveals who has access to what learning opportunities (Merriam, 1993; Merriam & Cafferella, 1999). The feminist perspective, with particular attention to societal power structure, has also been directly relevant to issues of oppression and disenfranchisement. A major thrust of critical theory has been to take adult learning to a macro perspective with the goal for social change and to uncover oppressive forces that hinder individuals from developing their full potential (Merriam, 1993). Thus transformational learning, eventually leads to emancipatory learning, which leads to social action (Merriam & Cafferella, 1999). All three are systematically intertwined. Therefore, cognitive functioning does not necessarily decrease with age. . However, from the work of cognitive scientists, there are apparent losses in both short and long-term memory as we age (Merriam & Caffarella, 1999).

Older adults take a longer time to process complex information. These cognitive challenges need to be considered for the adult learner. Learning style inventories, such as Kolb's Learning Style Inventory, have proven effective in assisting the adult learner. Learning results from stimulation of the senses (Lieb, 1991). When adult students are informed about their learning styles, they are better prepared to negotiate through the learning process. Despite the lack of uniform agreement about which elements constitute a learning style, it seems apparent that learning style inventories, unlike most cognitive style instruments, have

proved useful in helping both learners and instructors alike become aware of their personal learning styles and their strengths and weaknesses as learners and teachers (Merriam & Caffarella, 1999).

Adult learners are also very pragmatic. They want to see that what they are learning has application to something practical. Two ways adult educators have brought the experiential world of adults into the learning process is through cognitive apprenticeships and anchored practice, and the primary goal of each is to develop specific skills and competencies in a particular field. The more students practice the skill, the more proficient they become. While the desire and the ability to learn are not shared equally by everyone, both can be fostered by good teaching, by careful guidance, by building and enlarging sympathetic enclaves, and by providing a range of educational opportunities. These tasks are too great for partial and divided efforts.

The inquiring minds of the past have produced most of the advances of civilization. Therefore, our hopes for the future must rest in large measure on our capacity to increase the number and the ability of those who continue all their lives to share in the benefits and the pleasures of intellectual inquiry (Merriam, 1993). The fact that adult students think within the contextual frames of social, cultural, political and economic forces becomes a barrier to implementation of adult education because where adults are not for the type of adult teaching in place will mean that implementation of curriculum will not be successful.

2.9.3 Systems Theory

Systems theory is actually a term originated in and borrowed from the biological sciences, specifically from ecology (DuBois & Miley, 2002; Slossberg, Lynch & Chickering, 1989).

Ecology deals with the interaction of an organism and its environment. Although there is significant evidence that behaviour is pre-determined through genetics, there is also evidence to suggest that when the environment is altered, so will the behaviour alter (Schlossberg, *et al.*, 1989). In one environment, an organism may flourish; in another, it may perish. The same is true of the non-traditional student on a college campus. The essence of the ecological perspective is that both the individual and the environment are seen as important. To understand the persistence of the adult learner, one must understand the interaction of the learner with his or her environment, including family, community, work, and the learning institution (Astin, 2003; Bean & Metzner, 2005; Brown, 2002; Hagedorn, 2009; Harrington, 2003; Kasworm, 1999, 2002, 2003; Sandler, 2000). Schlossberg and colleagues (1989) suggests we need to see our institutions as environments that have the potential for facilitating or hindering adult learning.

Systems theory states that the whole is greater than the sum of its parts, exists through the interaction of its parts, and that when one part of the system is changed, the system will react to that change (Andrae, 1996; DuBois & Miley, 2002; O'Connor & McDermott, 2007; Senge, 1990). The profession of social work is built upon systems theory (Andrae, 1996; DuBoise & Miley, 2002). For adult learners to persist in their studies all parts of the whole must function and interact. The system theory is applicable in this case because managers need to cope with the changes around adult curriculum implementation to bring out conditions that favours its implementation and its sustenance by understanding its sub-systems therein and therefore creating a logical flow from these sub-components.

2.9.4: Reference Group Theory

This theory is based on the assertion that people identify themselves with the social and cultural group to which they belong or with that, they aspire to belong to. The group, which

they belong to, is known as the Normative Reference Group (NRG) while that one they aspire to belong to is a Comparative Reference Group (CRG) (McGivney, 1992). Although reference group theory has a long history, its application to the field of adult education has been an overlooked area. In using reference group theory to study adults' participation, there are several arguments, which can be made. For instance, the theory allows for common expectations regarding the socialization process into desired groups. It also explains why members of these groups are willing to adjust individualistic interest(s) in order to work on behalf of larger concerns. Naturally, a person will do or will not do what other people around him are doing or not doing. Therefore, if an adult is in a group of people who like attending learning programs, he or she is also likely to attend the same programs (Calder, 1993).

Adults like other peers, also experience peer pressure and this can determine whether an adult continues or drops from learning programs. An example of these peer pressures can be; men in villages telling their fellow men that what they are learning in the center is fit for women and not for men and somehow, this thinking could be a reason why most of the adult learners in evening programs in Kenya are women. In the case of Comparative Reference Group, people may participate in learning programs because they want to have new friends who are already participating in these programs. It is also common that adults will enroll for learning in learning centers where they see people they admire so that they can get a chance of being closer to them. Dench & Regan (2000) suggest that the influence by others on the individual plays a great role in making an adult interested in learning which can motivate him to enroll in learning programs.

The influence by family members, peers and teachers is especially of great importance. However, peer influence can also be dangerous to participation in learning activities where an individual can also be convinced to drop out of the program by peers who have already

dropped out or those who have never enrolled themselves in any learning program. This argument is supported by Calder (1993) asserting that adults look at learning as something that will heighten their job satisfaction or raise their material standards and to enable them improve their quality of life outside working hours. Comparative reference groups, give individuals a basis for comparing themselves or their group to other individuals or groups. Comparative reference groups also influence individuals' feelings and behavior. The reference group theory in this case is applicable to the perceptions that the adults have towards adult education. This is in specific reference to the fact that even adults influence each other through building of particular perceptions.

2.9.5 Gross, Giacquinta and Bernstein (1971) theory of implementing Curriculum innovations

According to this theory, there are three sets of specific factors that are conducive to the implementation of an innovation such as Curriculum. These include:- external conditions (parents and senior administrators) who should support efforts; the educational program and the education manager who should choose new teachers/trainers to implement the innovation; the “normative internal climate toward educational innovation” (p 72) in which a majority of the teachers express an interest in educational change and in parity of esteem between teachers and other members of non-teaching staff ; and the favorable level of resources (including more teacher aides, pro rata, than other schools in the locality). By observing and interviewing key administrators and teachers immediately prior to the introduction of the innovation and again towards the end of the school year it was concluded that the innovation was not being implemented. Gross et.al (1971) identified five principal barriers to curriculum innovation which were:-

- a) Lack of clarity: senior administrators not thinking through the innovation; a pronounced lack of communication, erroneous expectations between senior administrators and teachers; failure by teachers to fully understand the innovation, thus gradually reverting to their former ways of doing things.
- b) Lack of capability: teachers lacking the skills, knowledge or in-service training for their new role in 'open learning' and the absence of peer support.
- c) Unavailability of necessary materials: the existence of bureaucratic procedures in the purchasing systems of the regulating authority or government thereby hampering the buying of appropriate innovative materials and equipment.
- d) Incompatible organizational arrangements: administrators' lack of commitment by the school administrator and failure of communication making the classroom environment, the timetable and learner groupings to remain restrictive.
- e) Lack of commitment and motivation: teachers having mixed reactions to the implementation. The teachers' disenchantment with the lack of support is compounded by stress, the feeling that they are being 'used' by senior figures anxious to impress and - the final straw - by the accidental disclosure that some of them are to be transferred to different learning/training centers in the coming year or School term.

The conclusion was that the barriers were as a result of the strategy used by the lead implementing agency which had “failed to identify... the various types of difficulties teachers were likely to encounter... and failed to use feedback mechanisms to uncover the barriers that arose during the period of attempted implementation” (p 194). This theory is important and relevant to this study since it explores the various constraints that face Curriculum implementation-itself the core subject under study. In essence, it not only sums up the other theories above but also summarizes the entire subject of Curriculum implementation.

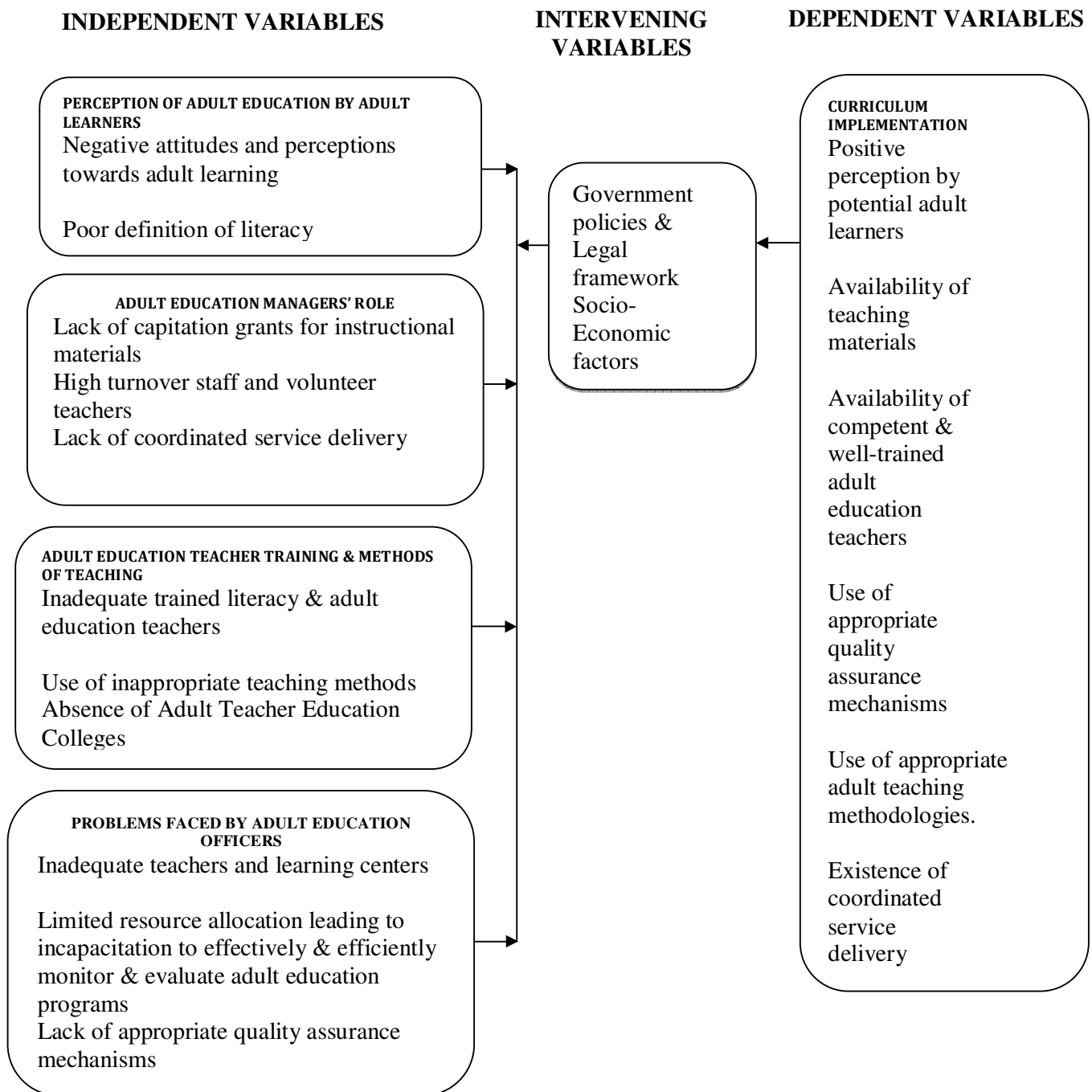
2.10 Conceptual Framework

A conceptual framework is a diagrammatical research tool intended to assist the researcher to develop awareness and understanding of the situation under scrutiny and to communicate this. A conceptual framework is used in research to outline possible courses of action or to present a preferred approach to an idea or thought. It can be defined as a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation. The interconnection of these blocks completes the framework for certain expected outcomes. An independent variable is one that is presumed to affect or determine a dependent variable. It can be changed as required, and its values do not represent a problem requiring explanation in an analysis, but are taken simply as given.

The independent variables in the study were perception of adult education by adult learners, adult education managers' role, adult education teacher training and methods of teaching, and the problems faced by adult education officers. A dependent variable is what is measured in the experiment and what is affected during the experiment, it responds to the independent variable. The dependent variable in the study is Curriculum implementation of adult education in Machakos County. However, the process of coming up with the desired outcome emanating from the interaction of the independent and dependent variables can be altered either positively or negatively by the intervening variables. In this study, the intervening variables were Government policies & Legal framework and Socio-Economic factors affecting the lives of the adult learners.

The conceptual framework was developed based on the assumption that there are Constraints affecting the implementation of adult basic education Curriculum. The variables that interact to constrain curriculum implementation are shown in the Conceptual framework. The perception of adult education by adult education learners, the adult education managers' understanding their role, methods of teaching, adult education and problems faced in monitoring and supervision are the independent variables, which constrain curriculum implementation. The extraneous variables affect both the independent and dependent variables in that they are part of everyday life and depending on the respondents' interaction with them; they are bound to affect perceptions and levels of awareness. These variables act as moderations of the dependent and independent variables. Constraints affecting the implementation of adult basic education curriculum together with their relationship formed the structure of the Conceptual framework of the study. Figure 2.7 indicates a Summary of variables that interact in the Constraining of Curriculum implementation as explained in the

Figure 2.7 Interactions of Constraints affecting Curriculum Implementation of Adult Basic Education Curriculum.



Source: Researcher

The Conceptual framework model indicates Constraints that affect Curriculum implementation of adult and basic education programs in Machakos County. Constraints affecting Curriculum implementation was moderated by Government policies and Socio-Economic factors. In this study, the researcher ensured that adult education learners from rural and urban areas participate equally.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

The chapter gives description of the research design, area of study, study population, sample and sampling techniques, instrument of data collection, procedure of collecting data, reliability and validity of the instruments, methods of data analysis and ethical considerations in the study.

3.1 Research Design

This is a descriptive survey study aimed at establishing the constraints affecting curriculum implementation in adult basic education and training in Machakos County. According to Kothari (2004), descriptive research is concerned with describing the characteristics of a particular individual, or a group. It intends to give specific predictions, with narration of facts and characteristics concerning individual or group situations. The research design and methodology entails collecting data useful in analysis and coming up with relevant recommendations and conclusions. According to Orodho (2003), a research design is a scheme, outline or a plan used to generate answers to research problems. Surveys enable collection of data from a sizeable population in a highly economical way. The data obtained is standardized, to allow easy comparison. Moreover, it explores the existing status of two or more variables at a given point in time. The survey generated both quantitative and qualitative data due to the nature of the instruments that were adopted which consisted of both semi-structured questionnaires and observation techniques. A qualitative methodology deals with non-numerical data, whereas a quantitative methodology treats numerical data relevant for the study. Questionnaires were coded to each set to give an easy guide to grouping the information. The collected data was processed which involved grouping the data

into classes of different departments, merging data from various smaller classifications to bigger classifications.

3.2 Study Area

The study was conducted in Machakos County, one of the 47 Counties in the Republic of Kenya. The County has eight Constituencies, namely Masinga, Yatta, Kangundo, Matungulu, Kathiani, Mavoko, Machakos Town and Mwala (IIEBC 2010). The County lies between latitudes 0.45'S and 1.31'S and longitudes 36.45'E and 37.45'E and covers an area of 6,850 km². It borders Mwingi and Kitui Counties to the East, Embu to the North, Nairobi and Thika to the West and Makueni to the South. The County is divided into ten Sub-counties namely, Athi River, Kathiani, Central, Matungulu, Kangundo, Mwala, Yathui, Yatta, Ndithini and Masinga. Appendix VI shows a Map of the County showing the administrative divisions and the location of study.

3.3 Study Population

Kothari (2004) defines study population as the sum total of elements about which inferences are to be made. Thus, the group made up of all possible observations of a characteristic of interest is the population, while a collection of observations presenting only a portion of that population is a sample (Denscombe, 2008). The research study targeted the total number of the 424 adult education centers (see Table 3:1), the 7104 adult education learners, (see Table 3:2) and 181 adult education teachers (see Table 3:3), all the 424 adult education center managers, and the eight District Adult and Continuing Education Officers (DACEO's). This target population provided data used to answer the research questions.

Table 3:1 Number of Adult Education Centres in Machakos County

NUMBER OF CENTERS				
DISTRICT	BL	PL	NFE SEC/PRY	TOTAL
MACHAKOS	55	22	2	79
ATHIRIVER	13	10	2	25
MWALA	41	37	2	80
KATHIANI	12	12	1	25
KANGUNDO	50	50	4	104
MATUNGULU	24	20	2	46
YATTA	21	21	0	42
MASINGA	15	8	0	23
TOTAL	231	180	13	424

Source: Machakos County Adult Education Office, Quarterly Reports, 2014

Table 3:2 Adult Learners Enrolment in Machakos County

DISTRICT	MALE	FEMALE	TOTAL
MACHAKOS	199	798	997
ATHIRIVER	214	307	521
MWALA	115	1003	1118
KATHIANI	29	264	293
KANGUNDO	233	1524	1757
MATUNGULU	60	601	661
YATTA	77	817	894
MASINGA	157	704	863
TOTAL	1086	6018	7104

Source: Machakos County Adult Education Office, Quarterly Reports, 2014

Table 3.3: Population of Adult Education Teachers in Machakos County

District	Fulltime teachers			Part time teachers			Self-help teachers			
District	M	F	T	M	F	T	M	F	T	Totals
Machakos	5	10	15	3	12	15	3	0	3	33
Athi River	1	5	6	1	4	5	0	0	0	11
Mwala	7	9	16	0	14	14	0	1	1	31
Kathiani	1	4	5	2	6	8	0	1	1	14
Kangundo	5	7	12	0	5	5	6	18	24	41
Matungulu	3	2	5	1	6	7	0	2	2	14
Yatta	4	4	8	4	6	10	0	2	2	20
Masinga	3	3	6	5	6	11	0	0	0	17
Total	29	44	73	16	59	75	9	24	33	181

Source: Machakos County Adult Education Office, Quarterly Reports, 2014

3.4 Sample and Sampling Techniques

A sample is part of the target population that is selected for the purpose of study (Mugenda & Mugenda, 2005). Chandran (2004) says that a sample size of any study should be based on what a researcher considers statistically logical and practicable. The researcher ensured a high degree of correspondence between the study population and the sample as the accuracy of the sample depends on the sampling frame. The sample size depends on what one wants to know, the purpose of the inquiry, what is at stake, what will be useful, what will have credibility and what can be done with the available time and resources (Patton, 2002). Chandran (2003) defines a sample as a small proportion of an entire population. A selection

from sampling is a process of selecting a number of individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire group (Orodho & Kombo, 2002).

According to Macorr research (2003-2015), correctly determining the target population is critical. A small, representative sample will reflect opinions and behaviour of the group from which it was drawn. A decision about the sample size should be based on factors such as time available, budget and necessary degree of precision. The three factors that determine the size of the confidence interval for a given confidence level are sample size, percentage of sample that picked a particular answer and population size. When determining the sample size needed for a given level of accuracy, one must use the worst-case percentage (50%). This percentage should be used to determine a general level of accuracy for a sample one already has.

To determine the confidence interval for a specific answer the sample has given, one can use the percentage picking that answer and get a smaller interval. Confidence interval is the plus-or-minus figure usually reported in the findings of a particular research. Confidence level tells how sure one can be. It is expressed as a percentage and represents how often the true percentage of the population who would pick an answer lies within the confidence interval. Sample Size Formula is therefore calculated as follows:-

$$Ss = \frac{Z^2 * p * (1-p)}{C^2}$$

Z=Z value (e.g. 1.96 for 95% confidence level)

P = percentage picking a choice, expressed as decimal (0.5 used for sample size needed)

C= confidence interval, expressed as decimal (e.g. 0.004 = $\pm$) (www.macorr.com).

Using the above formula through an automated system, a sample size was drawn from the target population of 7104 adult learners, 104 possible respondents were randomly chosen from among 19 adult education centers sampled from the 424 adult education centers (see Tables 3:4 & 3:5). From the 181 Adult education teachers, 18 possible respondents were chosen as shown in Table 3:6. Using stratified random and purposeful sampling, all the 19 adult education center managers from the selected adult education centers and eight District Adult and Continuing Education (DACEO's) were chosen. A total of 149 respondents were therefore used in the study.

Table 3:4 Adult Learners' Sample

DISTRICT	Population	Sample	Population	Sample	Total	Total
	Male	Size	Female	Size	Population	Sample Size
Machakos	199	6	798	7	997	13
Athi- River	214	6	307	7	521	13
Mwala	115	6	1003	7	1118	13
Kathiani	29	6	264	7	293	13
Kangundo	233	6	1524	7	1757	13
Matungulu	60	6	601	7	661	13
Yatta	77	6	817	7	894	13
Masinga	157	6	704	7	863	13
TOTAL	1086	48	6018	56	7104	104

Source: Author

Table 3:5 Adult Education Learning Centres' Sample

Centre Category	Population	Sample Size
Basic Literacy	231	6
Post-Literacy	180	6
Non- Formal	13	5
TOTAL	424	19

Source: Author

Table 3:6 Adult Education Teachers' Sample

Teacher Category	Population	Sample Size
Full Time	73	6
Part Time	75	6
Self Help	33	6
TOTAL	181	18

Source: Author

Stratified random sampling technique was used by the researcher because it ensured that each stratum (Adult Education Learning Centre) was represented in the sample. Stratified random sampling technique was used because the population of interest was not homogeneous and occurred in strata (Sproul, 1998). Besides, the sampling technique discourages bias in selection of respondents as well as giving fair representation of each stratum. Saturated random sampling was employed because it ensured that each member of the target population was also in the sample (Borg & Gall, 1989).

3.5 Methods of Data Collection

Sekaran (2010) defines data collection as a means by which information is obtained from the selected respondents of an investigation. The primary research data was collected from teachers of adult education centres in Machakos County using a questionnaire and supported by interview guides administered through interviews. Interviews were particularly useful for getting the story behind a participant's experiences. The interviewer pursued in-depth information around the topic. Interviews were useful as follow-up to certain respondents to questionnaires, for instance to further investigate their responses. For more insight data collection, the interviewer administered questionnaires which had the advantage of probing for more precise details.

Both primary and secondary data were used. However, primary data sources were used as the main data collection repository. Primary data was collected by use of the questionnaires with both open ended and closed ended questions which were administered to the respondents in the selected institutions. The close-ended questions provided more structured responses to facilitate tangible recommendations. The open-ended questions provided additional information that might not have been captured in the close-ended questions. The questionnaires were dropped to the selected institutions and collected after two days which was considered enough time for the respondents to fill them in with the help of the research assistants. The data collection commenced after training the research assistants, pre-testing the instruments, and obtaining an introduction letter from the university. The researcher supervised the assistants and held feedback meetings to collect completed data and ensured the research process was on course. Data was stored appropriately after each day's collection to safeguard any loss or interference.

3.6 Research Instruments

The study used two types of instruments to collect data namely: Questionnaires and interviews.

3.6.1 Questionnaires and Interview Guides

A questionnaire includes all techniques of data collection in which each person is asked to respond to the same set of questions in a pre-determined order (DeVaus, 1991). Since descriptive research survey was employed, it was worthwhile to use a questionnaire in the study. Three questionnaires and two interview guides were employed in collecting data. The questionnaires were Adult Education Learners Questionnaires (AELQ), see Appendix 1, Adult Literacy Teachers' Questionnaire (ALTQ), (Appendix 111), and District Adult and Continuing Education Officers' Questionnaire (DACEOQ), see Appendix IV. The Interview guides were an In-Depth Interview with Adult Education Learners on Their Perception of Adult Education (IDIAEL), see Appendix 11 and another Interview Guide for Adult Education Centre Managers (IGAECM) see Appendix V.

AELQ was used to solicit information from 104 respondents. A self-administered, delivery and collection questionnaire (Michael, 2010) was used. The first part of AELQ was a Guided Questionnaire on the Perception of Adults Education by Adult Learners that the respondent was expected to identify statements that truly represented their own perceptions towards adult education programs from a set of four (4) Statements. A further 11 statements were provided where the respondent was required to put a tick (✓) to the appropriate box to the right of each topic below to indicate whether they; Strongly Disagree (1), Disagree (2), Neutral (3) Agree (4) Strongly Agree (5).

The researcher sometimes checked on who would respond to the questions. This enabled him to ensure that the required respondents answered the questions hence, the reliability of the data was improved. AELQ consisted of both open ended and closed ended questions (Dillman, 2006; Fink, 2005). The questionnaire adopted a ranking question and a Likert Scale type of format to facilitate data analysis (Schindler, 2008; Dillman, 2006).

ALTQ were used to collect information from 54 Adult Literacy Teachers. ALTQ consisted of open ended and closed ended questions. The Questionnaire had items on understanding the particular teacher's profile; adequacy of teaching/ learning materials in their centres, data on how the respondents understood the role of adult education managers and if their understanding or lack of was a constraint to the discharge of their duties and a camouflaged self-evaluation of their teaching methods. This enabled the researcher to deduce if the teaching methods used by the respondents were suitable for teaching adults or not and if the methods were in anyway a constraint in the implementation of adult education curriculum. Research assistants administered the ALTQ.

DACEOQ involved data on the administrative procedures for recruitment of adult teachers, the competency of the teachers, understanding of reforms by the teachers and the challenges faced by learners, teachers, and adult education centre managers and if or not they were constraints in the implementation of adult education curriculum. Statements were provided and respondents were requested to put a tick (✓) on the appropriate box to indicate their opinions on whether they strongly Disagreed (1), Disagreed (2), Undecided (3) Agreed (4) Strongly Agreed (5) .DAEOQ was administered by the researcher himself.

Using IDIAEL that consisted of six essay type questions the adult education learners were further subjected to an in-depth interview on their perception of Adult Education.

IGAECM had 18 questions, which were used to gauge the Adult Education Centre Managers' understanding of their role in Adult Education.

Finally, the District Adult and Continuing Education Officers were provided with a Questionnaire (DACEOQ) on Problems Faced during Implementation of Adult education Programs. The respondents were given a set of 7 statements and were required to put a tick (✓) to the appropriate box to the right of each topic below to indicate whether they; Strongly Disagree (1), Disagree (2), Neutral (3) Agree (4) Strongly Agree (5) (Appendix VII).

The above five tools had the advantages of collecting the required information at a low cost per respondent, the respondents gave more honest answers in the absence of the researcher. The answers were standardized for closed-ended questions, and they filled the questionnaire at their convenience. Closed- ended questions provided objective quantitative data whereas the open-ended questions, provided general subjective insight into the study subject (Cargan, 2007).

3.7 Procedure of Administering Research Instruments

Before beginning to collect data, the researcher secured a research permit from the National Commission for Science, Technology and Innovations (NACOSTI) formerly National Council for Science and Technology (NCST) one month prior to carrying out the research. The researcher trained the research assistants on the administration of the research

instruments, interpretation of research items and ethical issues involved in research. The researcher then visited sampled Adult education administrative and learning centres notifying them of the research intention. The selected learning and administrative centres and respondents were assured that their anonymity and confidentiality was guaranteed.

Thereafter, the researcher administered the research instruments using a combination of two methods (a questionnaire and interview schedules) to collect information from respondents. A questionnaire is a method of gathering self-report information from respondents through self-administration of questions in a written form (Polit, 2004). It is commonly used to obtain important information about the population (Mugenda, 2003). A questionnaire consists of a set of structured questions that respondents were expected to respond to them appropriately. The items in the questionnaire were derived from the objectives of the study and research questions (Kothari, 1990). An interview is an oral administration of a questionnaire or an interview schedule. Interviews are face-to-face encounters. To obtain accurate information, the researcher endeavoured to have maximum cooperation from respondents. The researcher then established a friendly relationship with the respondent prior to conducting the interview (Mugenda, 2003). The responses of the respondents during the interview were recorded using note taking. The researcher took notes as the respondents talked. To ensure confidentiality of institutions and persons under study, codes were used to conceal their identity. The administering of the research instruments to the participants took a period of nine months inclusive of data analysis.

3.8 Pilot Testing

According to Mugenda, (2003), pilot test is necessary for the validity of a study. Mugenda and Mugenda (2003) further point out that normally, the pilot sample is between 1% and

10%, and that the larger the sample the smaller the percentage. To ascertain the validity and reliability of the questionnaires, a pre-test and pilot survey was conducted within Machakos town and its environs. The choice of the location of the pilot study was informed by the fact that most of the adult education centers, learners, and teachers had similar characteristics with the target population of study. The pre-test consisted of 1% (3) respondents in order to guarantee a suitable coverage of domain of each construct. The purpose of pilot testing was to establish the accuracy and appropriateness of the research design and instrumentation and to provide proxy data for selection of a probability sample (Saunders, Lewis & Thornhill, 2007). Cronbach's alpha was applied to determine the internal reliability of the questionnaire used in the study on the same pilot group and responses were collected with a view of establishing the consistency of the questionnaire. This method was preferred because most questions on the questionnaire were at a Likert scale.

3.8.1. Validity of the Instruments

Validity addresses the problem of whether a measure measures what it is supposed to measure (Zimund, 2000). According to Thietart (2001), the main concerns with the validity are whether the measured data is relevant and precise, and the second is the extent to which we can generalize from those results. In this research, validity brought up the question of whether the interviewer had measured in the right way and also all the interviewed questions had been properly constructed and presented and went well with the research's objective and purpose.

3.8.2 Reliability of the Instruments

According to Borg and Gall (1989), reliability is a measure of how consistent a research method is. Silverman (1993) outlined a number of ways that reliability can be achieved in

qualitative research. Pre-testing interview protocols and questions; using fixed-choice responses; and systematically collecting, transcribing and reporting field notes and transcripts for others to review as necessary was used. In this study, reliability was achieved through being a sole observer. The pilot study allowed for pre-testing of the research instruments for reliability. The clarity of the instrument items to the respondents was necessary so as to enhance the instrument's reliability. The aim was to correct any inconsistencies arising from the instruments, which ensured that they measured what was intended.

Reliability was also increased by including many similar items on a measure, by testing a diverse sample of individuals and by using uniform testing procedures. The researcher used Cronbach alpha method to test on the reliability. Cronbach measures the average of measurable items and its correlation and if the result is generally above 0.5 or 50 % it is considered reliable (Pieghambari, 2007). The study was also tested for quixotic reliability, which occurs when an observation always yields the same measurement. This reliability was trivial and misleading because the researcher only elicited rehearsed information. Diachronic reliability was also employed, since it included the stability of observation over time. However, this applied only to unchanged objects. Synchronic reliability was used when observations were similar at the same time.

3.9 Methods of Data Analysis

Data analysis is a practice in which raw data is ordered and organized so that useful information can be extracted from it. The process of organizing and thinking about data is a key to understanding what the data does and does not contain. Summarizing data is often critical to supporting arguments made with that data, as is presenting the data in a clear and understandable way.

Data collected was analysed by descriptive analysis. According to Myers (2005), the descriptive statistical tool helps the researcher to describe the data and determine the extent to be used. The findings were presented using tables. The Likert scale was used to analyse the mean score and standard deviation. This helped in determining the extent of curriculum implementation. Data was analysed through the use of Statistical Package for Social Sciences (SPSS) software (version 21.0) due to its ability to analyse with ease. The findings emerging from the analysis were used to compile this report. Content analysis was used in analyzing the open-ended questions. Content analysis is defined as a technique for making inferences by systematically and objectively identifying specified characteristics of messages and using the same approach to related trends (Nachmias & Nachmias, 2008). Multiple Regression analysis was also conducted to establish the form of relationship between dependent variable and the independent variables. The regression equation used was as follows:-

$$Y = a + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + e$$

Where: Y = Dependent Variable (Curriculum Implementation)

X₁ = Perception of Adult Education by Adult Education learners

X₂ = Understanding of Adult Education Centre Managers of their Role

X₃ = The ability of the Adult Education Teachers to deliver the Curriculum

X₄ = Problems faced by District Adult & Continuing Education Officers

e = error term

3.10 Ethical Considerations

The researcher explained the purpose of the study to the participants in order for them to make informed decisions on whether to participate in the study or not. The Adult Education teachers and the Managers were informed that the data would be used for intended research purpose only. To ensure anonymity, the respondents' personal data was not reflected in the

final report. The identities of the teachers and managers were concealed and the study findings were not reported on the basis of individuals to ensure confidentiality. Only those teachers and Managers voluntarily willing to participate in the study were engaged. Furthermore, the respondents were made aware that participation was voluntary.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

The chapter presents results and discussions on Constraints affecting curriculum Implementation in Adult Basic Education and Training in Machakos County, Kenya .The results and discussion are objective driven. The chapter first gives a presentation of the return rates of instruments and demographic characteristics of respondents; secondly, it gives an objective driven detailed presentation of the results and discussion of data.

4.2 Return rate of the instruments

The return rate of the instruments of the study are summarized as given in table 4.1

Table 4.1 Return rate of the Instruments

Instrument	Respondent	Sample	Actual	%
			Sample	Return
				Rate
Questionnaire		Issued	Collected	
ALTQ	Adult Literacy Teachers	54	50	93.37
AELQ	Adult Education Learners	104	101	97.57
IGAECM	Managers of Adult education centres	19	19	100.00
Interview		Anticipated	Effective	
DACEOII	District Adult & Continuing Education Officers	18	18	100.00

The researcher issued 54 Adult Education Teachers Questionnaires (AETQ's) and managed to collect 50 representing a return rate of 93.37%, 104 Adult Education Learners Questionnaires (AELQ's) and managed to collect 101 thus a return rate of 97.57%, 19 IGAECM and managed to collect 19 depicting a return rate of 100 %.

The researcher conducted an interview with all adult education officers thus representing a return rate of 100% each. The cumulative average return rate of the instruments was 96.98% .Any return rate less than 80.00% would jeopardize the study (Borg and Gall, 1989). This means that the study's return rate of instruments was within the required range.

4.3 Demographic Characteristics of Respondents

The demographic characteristics that featured in the study included gender, experience, age, academic qualifications of the respondents as presented in section A of the instruments of data collection. The characteristics were illustrated as below:

4.3.1 Gender Distribution of respondents

Gender of the respondents in the study was reported as shown in table 4.2

Table 4.2 Table showing Gender of respondents in the study

Respondent	Male %	Female %
Adult Literacy Teachers(ALT)	40 (80.47%)	10 (19.53%)
Adult Education Learners(AEL)	22 (21.63%)	79(78.38%)
Managers of Adult Education Centers (MAEC)	1(43.75%)	18(95.31%)
District Adult & Continuing education Officers(DACEO)	18(100%)	-

The study found out that there were more female respondents than male ones. There were 40 (80.47%) male and 10 (19.53%) females adult literacy teachers, 22(21.63%) and 79(78.38%) male and female adult education learners respectively, 1(43.75%) and 18(95.31%) male and female managers of adult education centres respectively. All the 18(100%) District Adult & Continuing education Officers (DACEO's) were males. The relatively small number of adult male learners (only 21.63%) in Machakos County is an issue that needs to be addressed in line with the Kenyan new constitution.

4.3.2 Academic Qualification of Respondents

The study sought to find out the academic qualification of the some respondents of adult basic education centers. Table 4.3 records their qualifications.

Table 4.3 Academic Qualifications of Respondents of Adult Basic Education Centres

Respondent	KCPE/ CPE	KCSE	A-Level	AT1/P1/S1	Degree	Others
ALT	19 (38.12%)	27(54.56%)	4 (7.32%)	-	-	-
MAEC	-	10(2.89%)	2(0.53%)	7(2.27%)	-	-
DACEO	-	-	-	-	9(50%)	9(50%)

Legend:

ALT- Adult Literacy Teachers

MAEC- Managers of Adult Education Centres

DACEO- District Adult and Continuing Education Officers

Results of the study found out that there were 19 (38.12%) adult literacy teachers with KCPE/CPE qualifications, 27 (54.56%) adult literacy teachers with KCSE qualifications, 4 (7.32%) adult literacy teachers with A-level qualifications in adult basic education centres in Machakos county. This finding collaborated Muya's (2013) findings that the adult education teachers were recruited from varying academic backgrounds ranging from Kenya Certificates of Primary Education (KCPE) through Kenya Certificate of Secondary Education (KCSE) to Kenya Advanced Certificate of Education (KACE).

Again, since none of the respondents had undergone any formal training as a teacher, this scenario has a direct bearing on adult education curriculum implementation as evidenced by Ndiku and colleagues (2009) findings that adult learners dropped out due to the instructors' incompetence. The situation is further compounded by the *Education for All 2015 National Review Report: Kenya* that states that currently there are no training colleges for the adult education instructors. The available training is in the adult certificate and diploma programs offered by the Kenya National Examination Council and some of the public universities. The recommendation that all the primary teachers training colleges include adult training programs for the primary teachers who upon graduation can be able to handle adult learners' programs by the Education For 2015 report is long overdue. This will not only address issues of capacity building but also address the teachers/instructors shortage.

The study found out that there were 10(2.89%) managers of adult education centers with KCSE qualifications, 2(0.53%) with A-level qualifications, 7(2.27%) with AT/P1/S1 qualifications in adult basic education centers in Machakos County. Half of the district adult and continuing education officers had a degree qualification.

4.3.3 Experience of adult basic education respondents DACEO

The respondents' experience was considered in the study because more experienced respondents were thought to provide the much needed data in the study as shown in table 4.4 below;

Table 4.4 Experience of adult basic education respondents

Respondent		≤ 5years	5-10years	10-15years	≥ 15years
Adult	Literacy	1(1.78%)	26(52.07%)	13(26.63%)	10(19.53%)
Teachers					
Managers	of Adult	2(10.16%)	14(75.78%)	3(14.06%)	-
Education Centres					
District	Adult &	7(37.5%)	4(25%)	-	7(37.5%)
Continuing Education					
Officers					

Results of the study showed that 1 (1.78%) Adult literacy teacher, 2 (10.16%) managers of adult education centres, 7 (37.5%) District Adult and Continuing Education Officers had an experience of less than 5 years in adult basic education centres, 26 (52.07 %) Adult literacy teachers, 14 (75.78%) managers of adult education centres, and 4 (25%) District Adult and Continuing Education Officers had experience of between 5-10 years, 13 (26.63%) of Adult literacy teachers, and 3 (14.06%) managers of adult education centres had an experience of

between 10-15 years, while 10 (19.53%) of adult literacy teachers and 7 (37.50%) of District Adult and Continuing Education Officers had an experience of over 15 years in adult basic education centres.

4.4 Results and Discussions of the study

4.4.1 Perceptual Constraints of adult Education Learners on Implementation of Adult Basic Education Curriculum.

Research Question 1:

The first question sought to find out the perceptual constraints of adult education learners in Machakos County in the implementation of Adult Basic Education Curriculum.

4.4.1.1 Perceptual constraints of adult learners on the implementation of Adult Basic Education Curriculum

Asked about their perception of adult education, the 101 adult education learners gave varying views as recorded in table 4.4.1

The adult education learners were requested by the research assistants to give their views on their perception of adult basic education as a constraint in the implementation of adult basic education Curriculum. Their responses were captured in the Likert scale as recorded in Table 4.1

Table 4.5. Perception of adult education learners on adult education managers as a constraint in the implementation of adult basic education (n=101)

Statement	Freq.					Total F	Total Score	Av. Score	% Score
	SA	A	U	D	SD				
Some men connect what is learnt in such programmes as women activities but I don't believe they are right	65	16	12	7	1	101	439	4.35	87
Adult Education programmes help to eradicate illiteracy, provide knowledge, skills and attitude for work, create self-confidence and foster positive behaviour towards life	69	20	5	7	0	101	455	4.50	90
Adult Education has helped me in daily life skills like reading, counting my money and communicating to people who do not understand my mother tongue	90	2	4	3	2	101	478	4.73	94.61
Due to my adult education learning, I am now able to interact well with other people.	58	25	15	3	0	101	439	4.35	86.91
I feel that I have grown emotionally, socially, intellectually and economically since joining adult education	44	20	22	14	1	101	393	3.89	77.79

If I were asked to pay for my adult education studies ,I would gladly do so	21	12	30	15	23	101	295	2.92	58.40
When I listen to what others say about adult education I feel encouraged to continue with the program	35	15	15	21	15	101	340	3.35	67.04
My self –esteem has greatly improved as a result of my learning in adult education	40	30	18	11	2	101	398	3.94	78.75
Because of my adult education learning, I can now face life challenges with confidence	11	20	29	30	11	101	293	2.09	58.02
As a result of my adult learning, the society has now given me a responsibility	4	30	16	38	13	101	279	2.76	55.23
I would recommend adult education to anyone who wants a better life	43	12	9	18	19	101	348	3.44	68.83

Source: Responses from the field

Classification of individual scores:

When requested by the research assistants to score on the Likert scale (SA (Strongly Agree)= 5, A(Agree) =4, U(Uncertain)=3, D(Disagree)= 2, SD(Strongly Disagree)= 1) their perception towards adult education programmes in Machakos County, the Adult education learners scored an average of 4.35(87%) on the item Some men connect what is learnt in such programmes as women activities. This means that they strongly disagreed that Some men connect what is learnt in such programs as women activities in the sub-county; scored an average of 4.50(90%)on the item adult education programs help to eradicate illiteracy,

provide knowledge, skills and attitude for work, create self-confidence and foster positive behaviour towards life.

This meant that they strongly agreed with the item; scored 4.73 (94.61%) on the item, an indication that the learners were certain that adult education programs positively affected their lives; scored 4.35 (86.91%) on the item that adult learners were able to interact well with other people; scored 3.89 (77.79%) on the item growing emotionally, socially, intellectually and economically since joining adult education, an indication that the learners were in agreement that their perception on the item was positive. . The thinking of these adults is supported by Calder (1993) who asserts that adults look at learning as something that will heighten their job satisfaction or raise their material standards and to enable them improve their quality of life outside working hours.

The score of 2.92 (58.40%) on the item If a learner were asked to pay for adult education studies, he/she would gladly do so, an indication that the learners disagreed with the item. This in essence is a danger signal to the learning process of the adults as attested by Dewey's (1948) philosophy of newer education that stressed the importance of experience in the learning process, the participation of the learner in the learning process, and the importance of perceiving learning as a lifelong process. Rightly put, there is no point in the philosophy of education which is sounder than its emphasis upon the importance of the participation of the learner in the formation of the purposes which direct his activities in the learning process (Dewey, 1948).

The adult education learners scored 3.35 (67.04%) on the item When an adult learner listens to what others say about adult education the adult learner felt encouraged to continue with the

programme, an indication that the learners were uncertain with the programmes offered. This agrees with Dench and Regan (2000) who suggest that the influence by others on the individual plays a great role in making an adult interested in learning which can motivate him to enroll in learning programmes. The influence by family members, peers and teachers is especially of great importance.

However, peer influence can also be dangerous to participation in learning activities where an individual can also be convinced to drop out of the programme by peers who have already dropped out or those who have never enrolled themselves in any learning programme. Comparative reference groups, give individuals a basis for comparing themselves or their group to other individuals or groups. Comparative reference groups also influence individuals' feelings and behaviour. The reference group theory in this case is applicable to the perceptions that the adults have towards adult education. This is in specific reference to the fact that even adults influence each other through building of particular perceptions.

The score of 3.94 (78.75%) on the item self –esteem has greatly improved as a result of learning in adult education, an indication that the learners agreed that the programmes were good; scored 2.90 (58.02%) on the item with adult education learning, a learner would face life challenges with confidence , an indication that the learners were uncertain that programmes offered were well intended; scored 2.76 (55.23%) on the item with adult learning, the society has given me a responsibility, an indication that the teachers were ambivalent about the programmes offered; scored 3.44 (68.83%) on the item an adult education learner would recommend adult education to anyone who wants a better life, an indication that the learners were uncertain of the programmes being offered. Generally, the

adult education learners scored an average of 3.73 (74.78%) on the Likert scale indicating that they agreed with the programmes offered in adult education centres.

The above findings tie very well with Kroger (1989), who opines that people tend to define themselves and others in comparison terms, to judge themselves according to some standards or to see themselves as better or less privileged than others. They often think that they do not live up to the required standards and this might lead to a low self-esteem. Some respond to this inadequacy with depression, anger and social withdrawal while others accept their situation as it is.

When asked about why they chose to do studies on adult education centres one of the adult education learners asserted that:

Mbikia vau ninitethekete muno ni kisomo kii nundu nindonya kusoma na kuandika Kiswahili na Kisungu nesa, na nindonya kwia kila nzomethetwe akilini ndekulwa. O ta ou kwisila kisomo kii nindonya kuneenanya na kutethyanya na andu nesa vate kuemanwa.(It was my choice to join adult education so that I may boost my own knowledge in education and also attain my goal in building my future career) (L12).

Yet others gave different perspectives such as “It was my choice to join an adult education so that I may boost my own knowledge in education and also attain my goal in building my future career” (L6) and “To meet my lost vision of education” (L3). This particular admission by the student confirms the findings of the international centre for education statistics, which conducted the recent large-scale international assessment of adults’ reading ability in the world by the international assessment of adult literacy (Baer, Kutner & Sabatini, 2009), that most adults who join adult education are unable to consistently read and understand

information at the basic level, or the level at which the average high school graduate reads (Titmus, 2009). This includes information in short, commonplace texts and simple documents, such as news articles, pamphlets, bus schedules and food labels. Many adults at the below basic literacy level have difficulty with even simpler reading tasks like locating specific information in short, commonplace texts (Kutner, 2007).

On the concern about benefits that learners have received from adult education, an adult education learner had this to say:

Wai unyuvi wakwa kusoma kisomo kii kya andu aima no kana nongelelee ui na nitonye kwianisya ndoto yakwa ya kwithiwa na maisha mailu (So far I have benefited a lot in that I can read and write in both English and Kiswahili and also memorizing what I have been taught by teachers in all the subjects. I have also learnt more on how to exchange different ideas and views that one has) (L 16).

“I received so many of them like improving in office skills and writing...you know” (L4). “I believe I shall have K.C.S.E certificate which is very important to the government entry point” (L2).

On the issue of particular benefits an adult education learner would reap from the adult education centres, one of the adult education learners attested that:

Ate o kutumbanya kukwata grade nzeo no kana tulike colleges nzeo, alimu maitu nimatusomethetye kwikalanya na andu nesa na kwoou ngatonya kwikalanya nesa na andu angi. Mwikalile wakwa o ta ou ukavinduka kwithiwe wi mwailu (Other than this, I think I will benefit more because our teachers teach us on how to socialize and how we can expound our minds in living with others apart from getting the required grades to join the higher colleges. I

think I will have a better foundation for my life than I had there before joining the adult education).

The benefits I have received from adult education are uncountable. i.e....I have met teachers who are of great help to me through the subjects they teach us, I have met my fellow students who are cooperative and devoted in studies; the environment is good and conducive for us and may God bless the principal and his staff members for their good work....You know...other benefits which I believe I shall gain from adult education are; Quality education because education is the key to a successful life, Being well disciplined, Being able to acquire knowledge which will help me a lot in life, being able to interact with all types of people(L 9).

On the general view about adult education programmes and education, one of the adult learners contended that:

Nikulya ala methiwa matatonya kwa nzia imwe kana ingi kukwata kisomo kii, moke malike tusome vamwe nundu ni kisomo kyailu na kitonyethasya andu kuvikia ndoto syoo (I would wish to encourage each and every one who has not gone through education to join an adult education system because it is a system that leads someone to somewhere as pertains to building your future career in education) (L 11).“I challenge those who want to join adult education to run too fast because it is a very beneficial program which has improved the future of many” (L7).

4.4.2 Constraints affecting Adult Education Managers on their understanding of their role in curriculum implementation of adult basic education.

Research Question 2:

The second research question responded to was: What are the constraints of Adult Education Centre Managers in understanding their role in the implementation of Adult Basic Education Curriculum in Machakos County? The respondents to this research question were 19 managers of adult education centres sampled from the 424 centre Managers in Machakos County. The Adult Education Centre Managers were requested by the research assistants to give their views in understanding their role in the implementation of Adult Basic Education curriculum as a constraint in the implementation of adult basic education. Their responses were captured in the Likert scale as recorded in Table 4.5 below.

Table 4.6 Perception of adult literacy teachers on adult education managers as a constraint in the implementation of adult basic education (n=19)

Statement	Freq.					Total F	Total score	Av. Score	%
	SA	A	U	D	SD				Score
Institutional team comprises very skilled personnel	10	5	2	1	1	19	80	4.20	83.91
Management contributes largely to the performance of adult learners	7	8	2	2	0	19	76	4.02	80.47
The management body is the determinant body of the wellbeing of the students	8	3	3	3	2	19	69	3.63	72.66
Reading management programs seek to amplify the benefits of independent	4	5	3	5	2	19	61	3.20	64.02

reading programs

The management staffs in the institution are very highly competent in ensuring performance of the institution	18	0	1	0	0	19	92	4.84	96.80
The management skills employed in the institution determines the wellbeing of teachers and other staff	9	6	2	1	1	19	77	4.08	81.54
Management staff and teaching staff receive training constantly	3	1	7	5	3	19	53	2.79	55.86
The ministry concerned vet staff employed	6	3	2	2	6	19	59	3.09	61.89

Source: Responses from the field

Classification of individual scores:

On the concern about institutional team comprising very skilled personnel, respondents scored 4.20 (83.91%) on the Likert scale .This means that they strongly agreed that the management team comprised very skilled personnel; on the issue of Management contributes largely to the performance of adult learners, the adult literacy teachers scored 4.02 (80.47%) on the Likert scale indicating that they agreed management largely contributes to performance of the adult learners; scored an average of 3.63 (72.66%) on the item management body is the determinant body of the well-being of the students. This meant that they agreed with the item; scored 3.20 (64.02%) on the item reading management programs seek to amplify the benefits of independent reading programs , an indication that the teachers were uncertain that management positively affected the lives of adult learners; scored 4.84 (96.80%) on the item.

The management staffs in the institution are very highly competent in ensuring performance of the institution; this meant that the adult literacy teachers were highly competent; scored

4.08 (81.54%) on the item an management skills employed in the institution determines the well-being of teachers and other staff ,indication that the teachers were strongly in agreement that their perception on the item was positive; scored 2.79 (55.86%) on the item Management staff and teaching staff receive training constantly an indication that the learners disagreed with the item. The adult education teachers scored 3.09 (61.89%) on the item the ministry concerned vet staff employed this showed that the teachers were uncertain with the item. Generally the adult literacy teachers scored 2.69 (53%), indicating that they were uncertain about the role of educational managers in adult educational centres in Machakos County.

4.4.3 Methodological constraints of teaching adult basic education in the implementation of adult basic education programmes

Research Question 3:

The third research question sought to find out how the teaching methodologies that are used in adult education are a constraining factor in the implementation of adult basic education curriculum in Machakos County .The adult literacy teachers were requested by the researcher to give the methods they use in teaching the adult education programs. Table 4.6 shows their details.

Table 4.7 Methods Adult literacy teachers use in teaching the adult learners programs. (n=50)

Statement	Freq.					Total F	Total score	Av. Score	% Score
	SA	A	U	D	SD				
Involves monitoring thinking processes, checking whether progress is being made towards the desired goal, and ensuring accuracy	29	9	8	1	3	50	213	4.26	85.21
Using verbal instructions and explanations, using appropriate music to complement learning, encouraging debate, discussion, and analysis.	36	11	1	1	1	50	230	4.61	92.19
Talking in a positive way, using word patterns such as rhyme, rhythm, or mnemonics to learn information, reading out loud, encouraging learners to question one another	23	5	7	11	4	50	181	3.63	72.54
Learning through formative assessment	17	13	3	6	11	50	169	3.37	67.46
Learning by considering, their existing thought and behaviour patterns.	29	4	7	10	1	50	214	3.99	79.88

Source: Responses from the field

Classification of individual scores:

Likert scale

SA (Strongly Agree) = 5, A (Agree) =4, U (Uncertain) =3, D (Disagree) = 2, SD (Strongly Disagree) = 1

When requested to score on the Likert scale their methods of teaching the adult learners' programs, the adult education teachers scored 4.26 (85.21%) on the item that the method used involves monitoring thinking processes, checking whether progress is being made towards the desired goal, and ensuring accuracy. This depicted that the adult teachers strongly believed that the methods they employed had such aspects; scored 4.61 (92.19%) on the item Using verbal instructions and explanations, using appropriate music to complement learning, encouraging debate, discussion, and analysis, an indication that they were strongly in agreement with this method; scored 3.63 (72.54%) on the item talking in a positive way, using word patterns such as rhyme, rhythm, or mnemonics to learn information, reading out loud, encouraging learners to question one another, depicting that they were ambivalent about the use of such a method, scored 3.37 (67.40%) on the item Learning through formative assessment, showing that they were uncertain about the use of this method; scored 3.99 (79.88%) on the item Learning by considering, their existing thought and behaviour patterns. This revealed that they were sure of using this method. Generally, the adult literacy teachers scored 3.97 (79.44%) indicating that they used the general methods revealed by the researcher.

The adult literacy teachers were requested by the researcher to give their responses on description of methods they used by ticking either true or false. Table 4.7 details their responses

Table 4.8: Description of methods of teaching used by adult education teachers (n=50)

Statement	True	False
Most part of my teaching involves teacher spoken discourse (including instruction, explanation, metaphor, questioning, responding, elaboration and management talk); visual representation (using a chalkboard, writing, diagrams, pictures, textbook, learning aids such as stones, experiments, drama) to understand or construct the new knowledge being presented or indicated to the learners; the act of setting or providing tasks for learners to cognitively engage with new content or develop physical skills, such as experimentation, reading, writing, drawing, mapping, rehearsing, problem solving, practicing a variety of social interactions, in which language is central between learners or learners and teacher such as pairs, groups, individually or whole-class; teachers' monitoring, use of feedback, intervention, remediation and formative and summative assessment of the students or assessment by the students.(<i>Pedagogical</i>)	38(75%)	12(25%)
Most part of my teaching is task or problem-centred. Most of the learning activities and examples use real-life situations in which learners can apply their new learning. I use various experiential techniques and practical application opportunities so as to allow learners to share and utilize their life experiences to solve problems. This includes but is not limited to group discussion, problem-solving activities, case studies, and scenario based activities. (<i>Andragogical</i>)	47(93%)	3(7%)
I usually tell my learners to know that they must learn if they want to pass or get promoted(<i>Andragogical</i>)	35(70%)	15(30%)
I usually tell my learners why they need to learn something; how the learning is going to benefit them and what the consequences are if they do not learn it. (<i>Andragogical</i>)	39(78%)	11(22%)
As a teacher, I take full responsibility for making all decisions about what will be learned, how it will be learned, when it will be learned, and if it has been learned and the learners have to follow my instructions. This is necessary since learners are often dependent on me in everything they do and treat them as such.(<i>Pedagogical</i>)	29(58%)	21(42%)
I see my learners as responsible for their own decisions and self-directing and treat them as such.(<i>Andragogical</i>)	17(33%)	33(67%)

I See my learners as having a subject-centred orientation to learning and this forms the basis of my teaching. (<i>Andragogical</i>)	32(63%)	18(37%)
I see my learners as having a life-centred orientation to learning and this forms the basis of my teaching. (<i>Andragogical</i>)	34(67%)	16(33%)
As a teacher, I am the director of all activities in the teaching learning process and without me I doubt whether any learning can take place. (<i>Pedagogical</i>)	14(28%)	36(72%)
As a teacher, I am just a facilitator, and the teaching- learning process is just a partnership between the learners and the teacher without the formal status differentiation. (<i>Andragogical</i>)	31(61%)	19(39%)
I usually have to tell my learners when they have to learn, since I know very well know that if I do not do that they won't learn. (<i>Pedagogical</i>)	29(58%)	21(42%)
I usually know that my learners are ready to learn since they understand why they need to know or do something and my role as a teacher is just to facilitate them achieve their objectives. (<i>Andragogical</i>)	22(43%)	28(57%)
My role as a teacher involves tapping into the life experiences of my learners to help them learn and solve problems. (<i>Andragogical</i>)	16(32%)	34(68%)
My role as a teacher involves tapping into my own life experiences and of other people I know to help them learn and solve problems. (<i>Pedagogical</i>)	9(18%)	41(82%)
In order to motivate my learners to learn I emphasize on external factors such as parents, teachers, and grades. (<i>Pedagogical</i>)	7(14%)	43(86%)
In order to motivate my learners to learn I emphasize on internal motivators such as self-esteem, quality of life, or increased job satisfaction. (<i>Andragogical</i>)	41(81%)	9(19%)

On the concern about spoken discourse, 38 (75%) respondents scored true while 12 (25%) scored false. This indicated that majority of the adult literacy teachers (75%) use child based (*Pedagogical*) methods of teaching. Considering whether most part of the teaching is task or problem-centred, forty seven of the respondents (93%) of the respondents said it was true while 3 (7%) said it was false. This meant that a great majority (93%) use *Andragogical* method that is mostly considered as applying to adults while a small number (7%) do not use the method. It should however be noted that though andragogical, this method has also

ametagogical element that can be shared by both children and adults. Merrium (1993) agrees with Knowles' discovery that pedagogy-andragogy represents a continuum ranging from teacher-directed to student directed learning, and that both approaches are appropriate with children and adults, depending on the situation.

Regarding the consideration peg promotion to learning and passing of exams, 35 (70%) scored true While 15 (30%) scored false. This indicated that a large number (70%) of the respondents prefer to use this *Andragogical* teaching method. It should however be noted that though andragogical, this method has also a metagogicalelement that can be shared by both children and adults.

On whether to tell learners why they need to learn something; how the learning is going to benefit them and what the consequences are if they do not learn it 39 (78%) said it was true while 11 (22%) said it was False. The implication here was that majority of the respondents used the *Andragogical* teaching methods that is used for teaching adults.

About taking full responsibility for making all decisions about what will be learned, how it will be learned, and when it will be learned, 28 (58%) admitted doing so while 21 (42%) were not committal on ever using this method. This in essence means that majority of the respondents use this *Pedagogical* teaching approach of teaching children in spite of being adult literacy teachers.

On whether to see learners as responsible for their own decisions and self-directing and treat them as such, 17 (33%) agreed while 33 (67%) disagreed. The fact that majority of respondents disagreed with this distinguished approach of teaching adults means that most

teachers used *Pedagogical* teaching methods that were more useful for teaching children than adults.

For 32 (63%) of the respondents to see learners as having a subject-centered orientation to learning and this forms the basis of their teaching as opposed to 18 (37%) was an indication that majority of the respondents preferred to use child appropriate methods of teaching though the would-be recipients of their services were in fact adults. With 34 (67%) of the respondents seeing learners as having a life-centred orientation to learning and this forming the basis of their teaching compared to 16 (33%) who see otherwise would suggest that the teachers are using this andragogical method that is used for adult learners.

Fourteen respondents (28%) did not see themselves as drivers of all the activities in the teaching-learning process as opposed to thirty-six of them (72%). This approach is used for children. Further, the finding is in line with participants (Brundage & MacKeracher, 1980) who argue that with a good set of materials, teachers and participants can still work out a way to learn even if teacher training has been insufficient. With 31 (61%) of the respondents seeing themselves as facilitators, and the teaching- learning process as just a partnership between themselves and the learners without the formal status differentiation, compared to 19 (39%) who see themselves differently is an indication that the adult education concept and approach has been well received by the respondents in this particular aspect.

A distinct majority of 29 (58%) compared to 21 (42%) of the respondents usually have to tell their learners when they have to learn, since they know very well know that if they do not do that they won't learn is indicative of the use of child-education approach in a scenario where the opposite should be true. A minority 22 (43%) of the respondents usually know that their

learners are ready to learn since they understand why they need to know or do something and their role as teachers was to facilitate them achieve their objectives compared to the majority 28 (57%) who know their learners are not ready to learn since they don't understand why they need to know or do something indicates that most adult literacy teachers still view their adult learners in the same way as they view the children learners.

With 16 (32% of the respondents viewing their role as a teacher as involving tapping into the life experiences of their learners to help them learn and solve problems compared to 34 (68%) who think otherwise is an indication of the preferred use of the child-education approach towards an education meant for adults. A notable minority of 9 (18%) of the respondents see their role as a teacher as involving tapping into their own life experiences and of other people they know to help them learn and solve problems as opposed to 41 (82%) who see the role of the teacher as tapping into the experiences of the learner points to the use of adult appropriate approach though this a shared method between adults and children.

A notable minority of respondents 7 (14%) believe that in order to motivate their learners to learn they should emphasize on external factors such as parents, teachers, and grades while a whopping majority 43 (86%) points to the use of an appropriate method for teaching adults.

Majority of the respondents 41 (82%) motivate learners to learn by emphasizing on internal motivators such as self-esteem, quality of life, or increased job satisfaction compared to nine (18%) who act differently. The indication here is that most respondents use adult appropriate methods of teaching.

From the above observations, it's notable that out of the sixteen (16) scenarios presented only 3 scenarios (5%) point to the use of teaching methods appropriate for adults by the adult

literacy teachers in Machakos County. The implication then is that majority (95%) of the adult literacy teachers use methods of teaching that are most suitable for children as opposed to adults. The reason for the adult education teachers' use of children's' teaching methods as opposed to adult teaching methods can be explained by the earlier finding that none of these teachers has any formal training in adult teacher education. This in effect means that since the only method they know or have ever come across in their lives is the same one their own Primary and secondary school teachers used (which incidentally is pedagogy) ,then they have no option other than to use the same methodology.

This conclusion is authoritatively informed by the Republic of Kenya (2012) finding that many scholars have pointed to the questionable impact of much teacher training, arguing that working habits acquired by persons who become teachers in the early stages of their own schooling tend to stay with learners to some degree throughout their learning and even teaching careers. The scholars further point out that the hardest element to change and the major challenge facing the profession concerns changing instructional practices towards greater collaborative relationships between teachers and learners. Teaching and learning are what ultimately make a difference in the mind of the learner, and thus affect knowledge, skills, attitudes and the capacity of young people to contribute to contemporary issues. This then means that teaching methods are actually a constraint in curriculum implementation of adult education programs in Machakos County.

4.5 Problems facing adult basic education officers in monitoring and supervision of adult education programmes

Research Question 4:

The fourth research question sought to find out the problems faced by Adult Education Officers in the monitoring and supervision of Adults Basic Education programs that may constraint curriculum implementation in Machakos County. The respondents to this research question were 18 District Adult and Continuing Education Officers.

When requested to give obstacles affecting curriculum implementation amongst adult learners in Machakos County, the District Adult and Continuing Education Officers supplied the data recorded in table 4.9 below.

Table 4.9: Perception of District Adult and Continuing Education Officers on obstacles facing Curriculum implementation of Adult Basic and Continuing Education Programs (n=18)

Statement	Freq.					Total F	Total score	Av. Score	% Score
	SA	A	U	D	SD				
There are no Minimum qualifications required for one to be a teacher	0	0	0	14	4	18	32	1.75	35
Unrealistic time constraints and inadequate resources, resulting in high drop-out rates and low skill acquisition	0	2	3	2	11	18	38	2.13	42.5
There is Inappropriate and inadequate provision of support services	0	4	4	1	9	18	41	2.25	45
Most of our Teachers have inadequate understanding of the reform	5	4	5	2	2	18	61	3.38	67.5
There is Lack of proper learning venues	2	9	5	2	0	18	65	3.63	72.5
Almost all learning centres have Inadequate teaching and learning equipment and improper supervision of the programs	4	5	5	4	0	18	63	3.5	70
There is Little or no funding at all by both the National and County governments	6	6	5	0	1	18	74	4.13	82.5

Source: Responses from the field

Classification of individual scores:

The district adult and continuing adult education officers were requested to score on the Likert scale their perception on obstacles facing the implementation of adult education. The score of 1.75(35%) on the item; there were no Minimum qualifications required for one to be

a teacher. Showed that that the respondents strongly disagreed with the item and that there were minimum qualification for the teachers handling the adult education.; scored 2.13(42.5%) on the item Unrealistic time constraints and inadequate resources, resulting in high drop-out rates and low skill acquisition, an indication that they strongly disagreed with the item; scored 2.25(45%) on the item that there were Inappropriate and inadequate provision of support services showing that provision services were adequate, scored 3.38(67.5%) on the item Most of teachers had inadequate understanding of the reform indicating that they were uncertain of the item ; scored 3.63(72.3%) on the item there was lack of proper learning venues indicating they agreed on the item.

Scored 3.5(70%) on the item; almost all learning centres had inadequate teaching and learning equipment and improper supervision of the programs. This meant that they agreed with the item that teaching and learning equipment were both inadequate and there was poor supervision. The score of 4.13 (82.5%) on the item; there is little or no funding at all by both the National and County governments. This meant that neither the county nor the Central government had released any funds for the support of the adult education programs.

Generally, the adult and continuing teachers scored 3.00(60%). This meant that their perception was that the obstacles were real impediments in the implementation of adult basic education.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter gives a summary of the study, conclusions, recommendations and issues for further research. All these were made based on the themes derived from the study.

5.2 Summary of findings

The study explored constraints affecting curriculum implementation in adult basic education and training in Machakos County. The main research questions that the study sought to answer were the following:

- i) What are the perceptual constraints of adult education learners in Machakos County in the implementation of adult basic education Curriculum?
- ii) What are the constraints of education Managers in understanding their role in the implementation of adult basic education Curriculum in Machakos County?
- iii) How are teaching methodologies that are used in adult education a constraining factor in the implementation of adult basic education curriculum in Machakos County?

- iv) What are the problems faced by adult education officers in the monitoring and supervision of adults basic education programs that may constrain curriculum implementation in Machakos County?

5.2.1 Perceptual constraints of adult education learners on implementation of adult education

Results of the study show that, though interested with and willing to learn adult education, most learners are unwilling to pay for the program. This was attested by the 2.92 (58.40%) score by the respondents on the item if a learner were asked to pay for adult education studies, he/she would gladly do so, an indication that the learners disagreed with the item. The implication is that since there has been very little commitment by both the Central and County Governments to fund adult education programs, with the only other guaranteed source of funding logically expected to come from the learners, then the program has serious challenges. Further, for the learners to be unwilling to pay for a program they are involved in as opposed to other learning programs may be an indicator that they either see it as someone's else responsibility, or they do not quite comprehend the benefits of the program and therefore not a priority or worthy spending on it. It thus follows that the financial constraints facing the program can only then be expected to be addressed by well-wishers including the donor community. This approach may not be tenable since the key stakeholders like the Central and County governments and the learners appear not to be keen on making any meaningful contribution thereby raising serious fears about the long-term sustainability of the program in Machakos County.

The perception of adult education by the general public is somewhat negative. No one appears to be proud to be an adult education learner. There is very little if any encouragement

out there for those who would want to join adult education programs. This was attested by the respondents score of 3.35(67.04%) to the item When an adult learner listens to what others say about adult education the adult learner felt encouraged to continue with the program. Though on the face of it was an indication that the learners were uncertain with the programmes offered, by implication the uncertainty would probably have been caused by the confusion which they as learners face as they try to decide on whether to believe what the general public thinks about the program and the actual benefits they see in their lives as a result of the program. This particular scenario where the learners are uncertain about the program leads to these two possibilities: - learners may easily drop out of the program due to lack of goodwill from the public; and secondly learners may find it very difficult to bring other learners on board as those who see not much sense in the program have greater numbers and would therefore easily discourage a potential learner. Perhaps this might explain why most men (who by nature have a greater ego than women) might have chosen not to be involved in the program in spite of the fact that they (men) may not necessarily be schooled well than their women counterparts.

There is a marked sense of skepticism in regard to adult education .Adult education learners and possibly the public do not seem to have a lot of faith in the program. They do not see it as being sincere and well meaning for them. This is evidenced by the 58.02% score on the item; with adult education learning, a learner would face life challenges with confidence which was an indication that the learners were uncertain that programmes offered were well intended. By implication, those charged with the implementation of adult education program should make every effort to assure the learners that both the motive and goal of the adult education programs has at its very core the interest of the learner.

Adult education perception is such that few people if any are actually convinced about the benefits of education and will rarely vouch for the program. Consequently, there is very little commitment to the program since not many people see it as the antidote to a good life. Adult education may be a good thing but few people are willing to take a bet on it as a key ingredient to a better life. The score of 3.44 (68.83%) on the item an adult education learner would recommend adult education to anyone who wants a better life, was an indication that the learners were uncertain on the programmes being offered. The uncertainty of the programs being offered would in effect mean that given an alternative a good number of adult education learners would be reluctant to join the programs. This then being the case, even after joining the program, chances of abandoning the learning at the slightest form of discouragement are very high. Curriculum implementers would thus need to be very careful with the adult learners since the slightest signal of the program becoming a bother or interference would have adverse effects on the attendance and even the actual learning process of the program. This in a sense limits the implementer on how far one can go to reinforce compliance of the requirements of the program especially those that touch on the learner.

5.2.2 Constraints of educational managers in understanding their role in the implementation of adult basic education Curriculum

This study found out the following as being the constraints of adult education Managers in understanding their role in the implementation of adult basic education Curriculum in Machakos County. The adult education Centre managers well understood their role as evidenced by the following:-Their understanding that Institutional team should comprise of very skilled personnel. This was attested to by the score of 4.20 (83.91%) on the Likert scale. By implication, the managers would always ensure that anyone whom they appointed to serve

in the management of their institutions would have the skill, competence, ability and perhaps the requisite experience for the task. This would then ensure that the adult education Centers would not face any operational or management hitches.

On whether adult education centre managers clearly understood their role, the respondents clearly understood that they would be held accountable for the performance of their Centres. The score of 4.02(80.47%) on the Likert scale indicated that they agreed that as management, they were to largely contribute to performance of the adult learners. On students' welfare the managers had no difficulty in understanding it as their responsibility. The average score of 3.63(72.66%) on the item management body is the determinant body of the wellbeing of the students confirmed this conviction.

The managers well understood the relationship between management skills and the wellbeing of staff and students as attested by the score of 4.08(81.54%) on the item and management skills employed in the institution determines the wellbeing of teachers and other staff.

However, the following shift of thought gave an impression that the Centre managers never quite understood a substantial number of their roles:-

Firstly, they didn't understand the need for reading management programs as evidenced by their score of 3.20(64.02%) on the item reading management programs seek to amplify the benefits of independent reading programs. This would thus mean that the immeasurable benefit brought about by the use of reading management programs stood either ignored or under braced in the adult education centres. Such a scenario would then be probably attributed to lack of proper training and equipping of the Centre managers. The conclusion about the training of these centre managers was well confirmed by the score of 2.79(55.86%)

on the item Management staff and teaching staff receive training constantly. Even so, the same thinking received a contraction by the 4.84. (96.80%) score on the item the management staffs in the institution are very highly competent in ensuring performance of the institution since this in effect meant that the Centre managers perceived themselves as highly competent. However, this assertion could as well be discredited by the fact that the managers were actually assessing themselves and would very unlikely judge themselves as being incompetent. Improper training and incompetence on the part of the centre managers was reinforced by the score of 3.09(61.89%) on the item the ministry concerned vet staff employed and the average score of 2.69(53%),that indicated that the Centre managers did not quite understand their role.

5.2.3 Methodological constraints of teaching adult basic education in the implementation of adult basic education programmes

This study in regard to how teaching methodologies that are used in adult education are a constraining factor in the implementation of adult basic education curriculum in Machakos County found out the following:- By scoring an average of 3.97(79.44%) ,the adult education teachers were well versed with and actually used general methods of teaching such as: monitoring thinking processes; checking whether progress is being made towards the desired goal ;ensuring accuracy; verbal instructions and explanations; appropriate music to complement learning; encouraging debate, discussion, and analysis; talking in a positive way; using word patterns such as rhyme, rhythm, or mnemonics to learn information; reading out loud; encouraging learners to question one another; formative assessment; and considering, their learners' existing thought and behaviour patterns. The use of general methods of teaching simply revealed that the adult teachers at least understood, were familiar with and probably practiced these basics of the teaching and learning process.

However, probed on their understanding, use and competence in regard to the specific methods of Pedagogy, Andragogy, Geragogy/Eldergogy and Metagogy, it was evident they had very little understanding of these (if any) and the possibility of having ever used them was extremely minimal. This was evidenced by the following:-The use of spoken discourse (75%); telling learners to know that they must learn if they want to pass or get promoted (70%); making all decisions about what will be learned, how it will be learned, and when it will be learned (58%); not seeing learners as responsible for their own decisions and self-directing and treat them as such (67%); seeing learners as having a subject-centered orientation to learning and this forming the basis of their teaching; having to tell their learners when they have to learn, since they know very well know that if they do not do that they won't learn (58%); not knowing that their learners are ready to learn since they understand why they need to know or do something and their role as a teachers was just to facilitate them achieve their objectives (57%); not viewing their role as a teacher as involving tapping into the life experiences of their learners to help them learn (68%); Generally, the methods used by these teachers were to a large extent those that an ordinary school teacher would use compared to the specialized methods of teaching that are unique for adults.

5.2.4 Problems facing adult basic education officers in monitoring and supervision of adult education programmes

The study found out that the following major problems that may constrain curriculum implementation in Machakos County are faced by adult education officers in the monitoring and supervision of adult's basic education programs. Most of the adult teachers (67.5%) had inadequate understanding of the reform. This would mean that the adult education officers

would sometimes find it a great challenge when trying to communicate adult education policies and processes to the adult education teachers. This would in effect slow down the teaching learning process and even strain the meager resources of both time and finances since they officers would be required to spend more time explaining and even sometimes to literally visit these teachers in order to educate them on the reforms.

There was lack of proper learning venues in most of the adult education centres (72.3%). This would then mean that most of the venues would be temporary and hence supervision and monitoring would be jeopardized since there would be no guarantees on where to find the teachers and learners.

Almost all learning centres (70%) had inadequate teaching and learning equipment and improper supervision of the programs. This would in effect mean that both teachers and learners fell short of what would normally be required to make the teaching and learning process a success. The adult education programs have little or no funding at all (82.5%) as neither the County nor the Central Governments have ever released funds for the running of the Centers. This would then mean that there is very little the officers could do in terms of the monitoring and supervision due to the serious mobility and logistical hitches that would otherwise require some expense to execute.

5.3 Conclusions of the study

Based on the findings of the study, the following conclusions were made:

5.3.1 Perceptual constraints of adult education learners on implementation of adult basic education

The significant perceptual constraints were:

The perception that adult education is not of much worth compared to other types and levels of education which ordinarily people would be willing to pay for in order to be allowed to study them. This was confirmed by the score of 2.92(58.40%) on the item If a learner were asked to pay for adult education studies, he/she would gladly do so. For some strange reason, adult learners (while admitting that the program is helpful) appear to be reluctant to incur any costs in getting this type of education and this can be interpreted to me that very little value is attached to the program. Adult education programs suffer from stigmatization and hence potential learners find it almost an embarrassment to be involved in the program as attested by the score of 3.35(67.04%) on the item When an adult learner listens to what others say about adult education the adult learner felt encouraged to continue with the program.

5.3.2 Constraints of educational managers on understanding of their role in adult basic education

The significant constraints of education managers on understanding of their role in adult basic education were:

Adult education centre managers do not understand the need for reading management programs as evidenced by their score of 3.20(64.02%) on the item reading management programs seek to amplify the benefits of independent reading programs. Management staff and teaching staff receive do not training constantly. As a result they may be ill equipped to

counter contemporary challenges bedeviling the education system which includes adult education programs.

The adult education staff that include the centre managers are rarely vetted by the concerned Government Ministry before being employed as evidenced by the score of 3.09(61.89%) on the item the ministry concerned vet staff employed

5.3.3 Methodological constraints of teaching adult basic education in the implementation of adult basic education programmes

The significant methodological constraints were:

Almost all of the adult education teachers had no understanding of the specific adult education teaching methods of Andragogy, Geragogy/Eldergogy and Metagogy. They therefore majored on the use of pedagogy similar to that used in primary and secondary school and this definitely had adverse effects on the overall and implementation of the Curriculum.

5.3.4 Problems facing adult basic education officers in monitoring and supervision of adult education programs

The study found out that most of the adult teachers (67.5%) had inadequate understanding of the reform in the adult education sector by the adult education teachers (67.5%) thereby giving the district adult and continuing education officers a difficult time as they try to assist the teachers to comprehend and implement some of the policies and processes in the delivery of the curriculum.

There was lack of proper learning venues in most of the adult education centers (72.3%) thus posing a great challenge during monitoring and supervision.

There was also evidence of inadequate teaching and learning equipment and improper supervision of the programs. This compromised the quality and delivery of the curriculum, severe financial constraints as a result of little or no funding from both the County and Central governments.

5.4 Recommendations of the study

The following were the recommendations made for this study:

In light of the findings that there are perceptual constraints of adult education learners on implementation of adult basic education, this study recommends that:

Every effort should be done by all the stakeholders in adult and continuing basic education to either reduce or get rid of the stigma associated with adult education since this affects both the learners and those that are charged with its supervision and monitoring.

In light of the findings that there are constraints of educational managers in understanding their role in adult basic education, this study recommends that:

Adult education Centre managers should be vetted before being employed and after employment should be subjected to proper training to enhance their skills and abilities.

In light of the findings that there are methodological constraints of teaching adult basic education in the implementation of adult basic education programs, this study recommends that:

The government should make every effort to train adult education teachers and in future employ those that have proper training in the field in order to enhance professionalism in the sector.

In light of the finding that there are problems facing adult basic education officers in monitoring and supervision of adult education programs, this study recommends that:

The government should make every effort to secure proper learning venues and release funds to support the literacy programs and also to facilitate the district adult and continuing officers to monitor and supervise the programs.

5.5 Suggestions for further research

Based on the above conclusions and recommendations, the following suggestions for future research were made: A Study should be carried out on:

- i) An examination of the Causes of Stigma in Adult and Continuing basic education in Kenya.
- ii) An Assessment of the factors causing the low enrolment of men in adult and continuing education programs.
- iii) Towards the Development of a Policy Framework for adult education in Kenya.

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APPENDICES

APPENDIX I : Adult Education Learners' Questionnaire (AELQ)

A Self- Administered Questionnaire on the Perception towards adult education programs by adult education learners

1. What is your perception towards adult education programs? Please tick (✓) those statements that truly represent what you think.

- i. No impact on adults ☐
- ii. Improves literacy in adults ☐
- iii. Improves family life ☐
- iv. Leads to national development ☐

2. The following information shows the perception of adult learners on adult education programs Machakos County

INSTRUCTIONS: Put a tick (✓) to the appropriate box to the right of each topic below to indicate whether you; Strongly Disagree (1), Disagree (2), Neutral (3) Agree (4) Strongly Agree (5)

	1	2	3	4	5
Some men connect what is learnt in such programmes as women activities but I					
Adult education programmes help to eradicate illiteracy, provide knowledge,					

Adult education has helped me in daily life skills like reading, counting my money and communicating to people					
Due to my adult education learning, I am now able to interact well with other people					
I feel that I have grown emotionally, socially, intellectually and economically since joining adult education					
If I were asked to pay for my adult education studies ,I would gladly do so					
When I listen to what others say about adult education I feel encouraged to					
My self –esteem has greatly improved as a result of my learning in adult education					
Because of my adult education learning, I can now face life challenges with					
As a result of my adult learning, the society has now given me a responsibility					
I would recommend adult education to anyone who wants a better life					

APPENDIX 11: An In-Depth Interview with Adult Education Learners on Their Perception of Adult Education (IDIAEL)

1. Why did you choose to join adult education in the first place?

Swahili: Kwa nini ulichagua kujiunga na Masomo ya watu wazima?

Kamba: Ni kitumi kyau kyatumie ulika kisomoni kii kya andu aima?

2. So far what benefits have you received from adult education?

Swahili: Mpaka hapo umefikia, ni manufaa gani umepata kutoka kwa elimu ya watu wazima?

Kamba: Mbika yavu ni utandithyo kana vaita mwau wonete kwisila kisomoni kwa andu aima?

3. What other benefits do you believe you shall gain from adult education?

Swahili: Ni faida zingine zipi ambazo unaamini unazipata ukiendelea na elimu ya watu wazima?

Kamba: Ni maundu angali meva ukowona utonya kukwata waendee na masomo aya ma andu aima?

4. As a beneficiary of adult education what message can you give to those who may want to join adult education or are fearful of doing so?

Swahili: Kama mmoja wa wale ambao wamesaidika sana ma elimu ya watu wazima, ni ujumbe gani unaoweza kuwaambia wale ambao wangetaka kujiunga na elimu hii au wale wanaogopa kujiunga nayo?

Kamba: Ta wii umwe wa la matethekete muno ni masomo ma andu andu aima, ni undu mwau wenda kumatavya ala mekwenda kulika kisomoni kii kala ala wethiwa mayiwa wia kukilika?

5. What challenges/problems have you faced as an individual or corporately during your time of study?

Swahili: Ni matatizo/shida gani ambazo wewe binafsi au pamoja na wenzako mmekumbana nayo wakati mlipokuwa mkisoma?

Kamba: Ni mathina meva withiwa we mbene kana asomi ala angi mwithiwa mukomanite namo namo ivinda yila muusoma masomo aya?

6. What recommendations can you give to both your teachers and their superiors on the best way to deal with these challenges and problems?

Swahili: Ni mapendekezo gani amabayo ungependa kuwapa waalimu wako pamoja na wasimamizi wao kuhusu kupambana au kutatua shida au matatizo yalilyotajwa hapo juu?

Kamba: Ni mawendeesyo meva wenda kumanenga alimu maku na aungamii moo yiulu wa mathima ala uvitilite kana maundu ala maile kwikwa kwailya kisomo kii kya andu aima?

APPENDIX 111: Interview Guide for Adult Education Centre Managers (IGAECM)

Date of

interview.....

Interviewee's

code.....

Place of interview

.....

Duration of

interview.....

Dear respondent,

I am Edward Nzinga a Post Graduate student at Kabarak University doing a research in partial fulfilment for the Doctor of Philosophy (Education). I wish you to assist me in doing my research by providing me with some relevant information. Please note that any information given in this questionnaire will be treated confidentially and used for academic purpose only.

Thank you in advance.

- i) How do you ensure there is adequate accountability and transparency in management and allocation of funds in your institution?
- ii) Are there textbooks available for adult education programmes in your district/division?
- iii) Are there chances of funds mismanagement in adult learning institutions?
- iv) Do you inspect/supervise the teaching/learning in the adult learning centres?
- v) Does the adult learning institutions with any other learning institution(s), NGOs, FBOs, civil societies or government department(s) in the field of providing adult education?
- vi) Do you agree that greater amount of school funds are from the student fees?

- vii) Does the institution management involve the other staff members in funds allocation?
- viii) How do you ensure that the institution management team comprises of skilled personnel?
- ix) Explain how the management of adult learning institutions contribute to the performance of the adult students.
- x) Do you agree that the institution's management is the major determinant body of the well-being of the students?
- xi) What challenges are experienced in your district/division as far as provision of Adult Literacy Education is concerned?
- xii) How do you do to ensure the management skills in the institution is very highly competent in ensuring performance of the institution.
- xiii) Do you agree that the methods of education must be reformed to include new information technologies and environmental issues taught by the teachers?
- xiv) Do you agree that a large amount of student fees is from donors and non-governmental institutions?
- xv) Does the government provide financial support to adult schools?
- xvi) How do you ensure there is efficient transparency and accountability in institution funds allocation and management in adult learning institutions?
- xvii) Do you agree that there is rising students' enrolment ratio in adult schools that has necessitated accelerated expansion of school programmes?

APPENDIX VII : Adult Literacy Teachers' Questionnaire (ALTQ).

Dear respondent,

I am Edward Nzinga a Post Graduate student at Kabarak University doing a research in partial fulfilment for the Doctor of Philosophy (Education). I wish you to assist me in doing my research by providing me with some relevant information. Please note that any information given in this questionnaire will be treated confidentially and used for academic purpose only.

Thank you in advance.

PART A: BIODATA OF RESPONDENTS

Instructions: Fill the blank spaces or tick the right brackets accordingly.

1. Centre name:

2. Gender: Male () Female ()

3. Age (in years).....

4. Highest level of academic qualification. (tick appropriately)

K.C.P.E () KCSE () A-Level () Degree () Any other, specify.

.....

5. Highest level of professional qualification. (Tick appropriately)

AT 1 () P1 () S1 () Any other, specify.....

6. Teaching experience (in years):

7. Which syllabus do you normally use?

.....

ABET I () ABET II () ABET III () None ()

Any other, specify

PART B: Institutional Management

8. Comment on the following issues on adult education managers in Machakos County.

INSTRUCTIONS: Put a tick (✓) at the appropriate parentheses the right statement to indicate whether you; strongly Agree, Disagree; Agree; Strongly Agree; Do not Know

	Strongly Disagree	Disagree	Agree	Strongly Agree	Do not Know
The institution management team comprises of very skilled personnel					
The management contributes largely to the performance of the adult students					
To promote unconstrained skills, scholars and educators have advocated for wide reading					
The institution's management is the major determinant body of the well being of the students.					
Reading management programs seek to amplify the benefits of independent reading programs					
The management staffs in the institution are very highly competent in ensuring performance of the institution.					
The management skills employed in the institution determines the wellbeing teachers and other staff					
Management staff and teaching staff					

receive training constantly					
The ministry concerned vets staff employed					

PART C: Methods used in Teaching Adult Education

9. Are teaching learning/ material adequate in your centre?

Enough () Not enough () Not available ()

10. How do you rate yourself as a teacher in terms of content delivery?

Excellent () Good () Fair () Poor ()

11. The following information shows methods of teaching adult education.

INSTRUCTIONS: Put a tick (√) to the appropriate box to the right of each topic below to indicate whether you; Strongly Disagree (1), Disagree (2), Agree (3) Strongly Agree (4) Do not Know (5)

	Strongly Disagree	Disagree	Agree	Strongly Agree	Do not Know
Involves monitoring thinking processes, checking whether					
Using verbal instructions and explanations, using appropriate					
Talking in a positive way, using word patterns such as rhyme,					
Learning through formative					

Learning by considering, their existing thought and behaviour					
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PART D

12. The following information gives a description of methods of teaching.

INSTRUCTIONS: Put a tick (✓) to the appropriate box to the right of each topic below to indicate whether you; A. True. This is the method I use. B. False. I don't use this method

		QUESTION	TICK
1	A.	Most part of my teaching involves teacher spoken discourse (including instruction, explanation, metaphor, questioning, responding, elaboration and management talk); visual representation (using a chalkboard, writing, diagrams, pictures, textbook, learning aids such as stones, experiments, drama) to understand or construct the new knowledge being presented or indicated to the learners; the act of setting or providing tasks for learners to cognitively engage with new content or develop physical skills, such as experimentation, reading, writing, drawing, mapping, rehearsing, problem solving, practising a variety of social interactions, in which language is central between learners or learners and teacher such as pairs, groups, individually or whole-class; teachers' monitoring, use of feedback, intervention, remediation and formative and summative assessment of the students or assessment by the students.	
	B.	Most part of my teaching is task or problem-centred. Most of the	

		learning activities and examples use real-life situations in which learners can apply their new learning. I use various experiential techniques and practical application opportunities so as to allow learners to share and utilize their life experiences to solve problems. This includes but is not limited to group discussion, problem-solving activities, case studies, and scenario based activities. Most part of my teaching is task or problem-centred. Most of the learning activities and examples use real-life situations in which learners can apply their new learning. I use various experiential techniques and practical application opportunities so as to allow learners to share and utilize their life experiences to solve problems. This includes but is not limited to group discussion, problem-solving activities, case studies, and scenario based activities.	
2	A.	I usually tell my learners to know that they must learn if they want to pass or get promoted	
	B.	I usually tell my learners why they need to learn something; how the learning is going to benefit them and what the consequences are if they do not learn it.	
3	A.	As a teacher, I have take full responsibility for making all decisions about what will be learned, how it will be learned, when it will be learned, and if it has been learned and the learners have to follow my instructions. This is necessary since learners are often dependent on me in everything they do and treat them as such.	
	B.	I see my learners as responsible for their own decisions and self-directing and treat them as such.	

4	A	.I See my learners as having a subject-centred orientation to learning and this forms the basis of my teaching.	
	B.	I see my learners as having a life-centred orientation to learning and this forms the basis of my teaching.	
5	A	As a teacher, I am the director of all activities in the teaching learning process and without me I doubt whether any learning can take place.	
	B.	As a teacher, I am just a facilitator, and the teaching- learning process is just a partnership between myself and the learners without the formal status differentiation.	
6	A.	I usually have to tell my learners when they have to learn, since I know very well know that if I do not do that they won't learn.	
	B.	I usually know that my learners are ready to learn since they understand why they need to know or do something and my role as a teacher is just to facilitate them achieve their objectives.	
7	A	My role as a teacher involves tapping into the life experiences of my learners to help them learn and solve problems.	
	B.	My role as a teacher involves tapping into my own life experiences and of other people I know to help them learn and solve problems.	
8.	A	In order to motivate my learners to learn I emphasize on external factors such as parents, teachers, and grades.	
	B.	In order to motivate my learners to learn I emphasize on internal motivators such as self-esteem, quality of life, or increased job satisfaction.	

APPENDIX V: District Adult and Continuing Education Officers Questionnaire

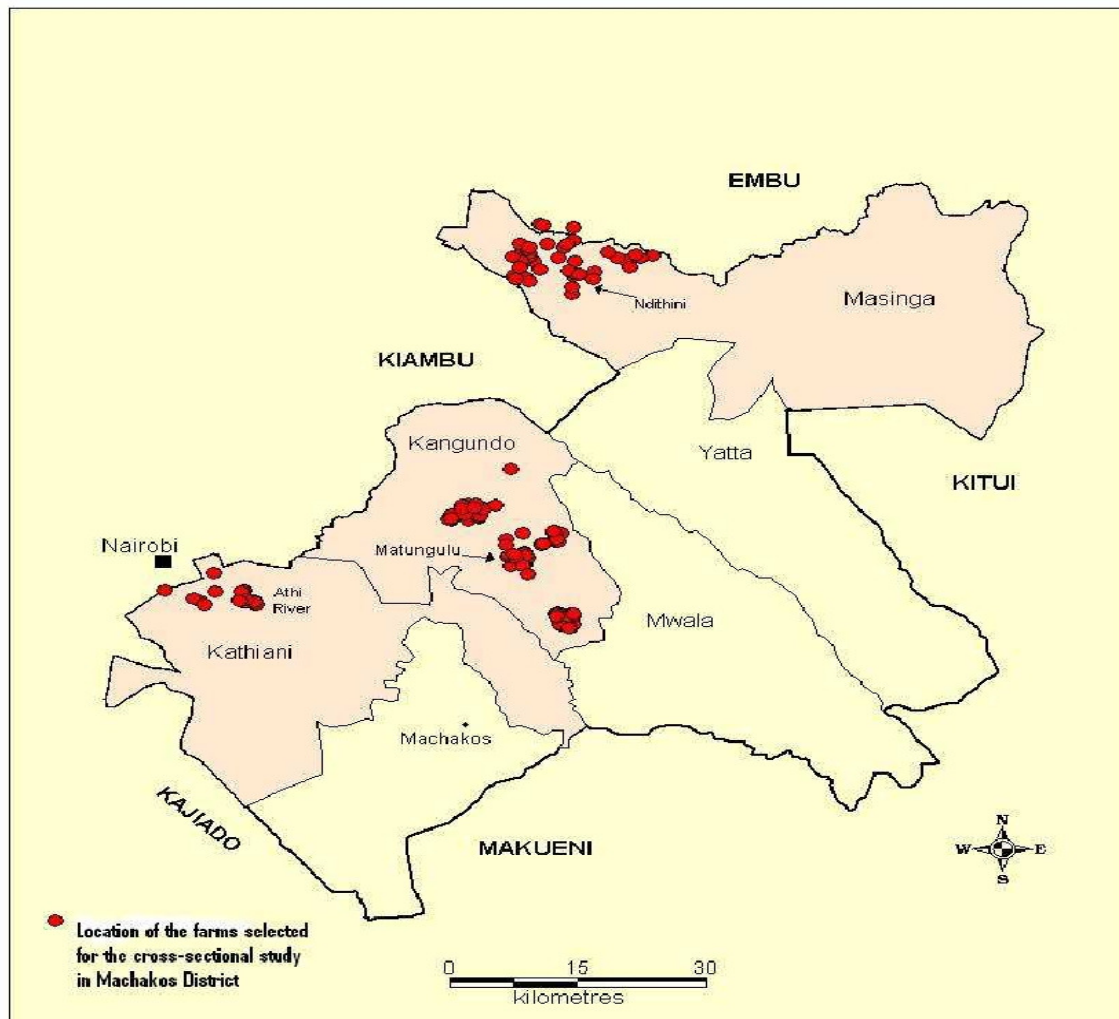
(DACEOQ)

1. The following information shows obstacles affecting curriculum implementation amongst adult learners in Machakos County.

INSTRUCTIONS: Put a tick (✓) to the appropriate box to the right of each topic below to indicate whether you; Strongly Disagree (1), Disagree (2), Agree (3) Strongly Agree (4) Do not Know (5)

	Strongly Disagree	Disagree	Agree	Strongly Agree	Do not Know
There are no Minimum qualifications required for one to be a teacher					
Unrealistic time constraints and inadequate resources, resulting in high drop-out rates and low skill acquisition					
There is Inappropriate and inadequate provision of support services;					
Most of our Teachers have inadequate understanding of the reform					
There is Lack of proper learning venues					
Almost all learning centres have Inadequate teaching and learning equipment and improper supervision of					
There is Little or no funding at all by both the National and County governments					

APPENDIX V1:Map of Machakos County Showing Administrative Divisions



APPENDIX V11: National Basic Functional Literacy Curriculum

A. An Abridged Version of ABET 1

NATIONAL BASIC FUNCTIONAL LITERACY CURRICULUM

OBJECTIVES OF BASIC FUNCTIONAL LITERACY CURRICULUM

At the end of basic literacy (ABET 1) program, the learner should have acquired knowledge and skills that enable him/her to:

- a) Read, write and perform arithmetic calculations related to their daily activities
- b) Participate fully in development activities within his/her community
- c) Use acquired skills for further education
- d) Communicate effectively in mother tongue, Kiswahili and English
- e) Accept responsibilities and perform them with integrity
- f) Respect and participate in the preservation of Kenya's rich cultural heritage
- g) Understand and practice human/civil rights and responsibilities
- h) Develop awareness and appreciation of other nations
- i) Embrace healthy living environment conservation.

NATIONAL BASIC FUNCTIONAL LITERACY CURRICULUM

INTRODUCTION

Experience has shown that the wealth of knowledge the adults bring to the literacy class help them to master literacy skills in about one to one and a half year. After this period, most of them are able to embark on post-literacy programs. The curriculum is divided into four subjects coded as follows:

- a) Reading and writing
- b) Numeracy

- c) Kiswahili and any other needed
- d) English

Each subject will be taught in three phases, namely:

STAGE 1 (A1, B1, C1, D1)

This is an introductory phase whose content will be for those literacy students who have not had any formal (school) education in their life-time. It is also intended for those who dropped out of school system in the early primary classes and have relapsed into illiteracy.

This content will enable the adult learner to read and write simple words, and also read and write numbers correctly. This phase may take three to six months.

STAGE 2 (A2, B2, C2, D2)

This is an intermediate phase in the literacy continuum. The content to be covered will lead to semi-literacy, where by the adult learner will be able to read short notices, road signs, newspaper headlines and also read and write numbers up to three digits

This phase may be completed within four to six months.

STAGE 3 (A3, B3, C3, D3)

This is the final phase of functional literacy. The content covered will enable the learners to read long passages fluently and with understanding in the mother tongue or language of catchment area. They will be able to identify and use correct arithmetic operations in their everyday life situations such as keeping simple accounts and records of day to day transactions. The adult learners will also be able to communicate effectively in Kiswahili and any other applicable language.

This stage may take three to six months.

READING AND WRITING

INTRODUCTION

The purpose for teaching reading and writing is to provide the adult and out of school youth with the necessary knowledge and skills in reading and writing in their mother tongue or any other language of their choice.

A literate person has been defined as one who is able to read, write and with understanding.

This unit addresses the two components of literacy namely: reading and writing at a basic level.

It is expected therefore, to be taught first before Kiswahili and English languages.

GENERAL OBJECTIVES

At the end of this learning area, the learner should be able to:

- a) Develop fluency in reading
- b) Develop skills in writing legibly, intelligibly and at a reasonable speed
- c) Develop a desire to acquire and apply new knowledge
- d) Develop an appreciation for leisure reading
- e) Write an account on a given topic in a systematic manner
- f) Utilize reading and writing skills to communicate
- g) Develop a desire to acquire new knowledge on emerging issues which are of concern to them
- h) Promote positive attitude in reading for life-long education
- i) Use the acquired reading and writing skills to learn other languages.

Source: Republic of Kenya, 2007)

COURSE SUMMARY

READING AND WRITING

STAGE ONE

Pre-reading

Pre-Writing

STAGE TWO

Reading

Writing

STAGE THREE

Reading

Writing

NUMERACY

STAGE ONE

Whole numbers and operations

Fractions and operations

Decimals and operations

Time

Money

STAGE 2

Whole numbers and operations

Fractions and operations

Arithmetic operations using a calculator

Time
Length
STAGE THREE
Decimals and operations
Length
Area
Mass
Capacity
Simple record keeping
Bank accounts
KISWAHILI
STAGE ONE
Kusikiliza na kuongea
kusoma
Kuandika
Sarufi
Msamiati
STAGE TWO
Kusikiliza na kuongea
Kusoma
Kuandika
Sarufi
Msamiati
STAGE THREE

Kusikiliza na kuongea Kusoma Kuandika Sarufi Msamiati
ENGLISH STAGE ONE Listening and speaking Reading Writing STAGE TWO Listening and speaking Reading Writing STAGE THREE Listening and speaking Writing Reading

Source: Department of Adult Education, Republic of Kenya

B. An Abridged Version of ABET 11

ADULT BASIC EDUCATION AND TRAINING (ABET) LEVEL TWO

ENGLISH

GENERAL OBJECTIVES

By the end of the ABET 11 course, the learners should be able to:

- a) Listen their and respond effectively to issues concerning daily lives
- b) Develop a desire to acquire and apply new language items in line with daily needs
- c) Read messages on contemporary and emerging issues such as HIV and AIDS, gender issues, human /civil rights, drug and sustainable abuse and environment
- d) Develop ability to continue reading and learning for information as well as for pleasure
- e) Develop ability to express ideas meaningfully and legibly in correct English.

COURSE SUMMARY

Code	Module unit	Sub-module unit	Suggested time (Hrs)
1.0	INTERPERSONAL RELATIONS	Language patterns - Formal greetings according to time - Etiquette Vocabulary Grammar - Proper nouns - Common nouns - Personal pronouns - Punctuations	27

		- Capital letters	
2.0	HEALTH AND HYGIENE	Language patterns - Almost+verb - Adverbs of time: late, early, soon Vocabulary Grammar - Comma - Full stops - Singular nouns - Plural nouns - Demonstrative pronouns	28
3.0	MEANS OF COMMUNICATION	Language patterns - Same + nominal + as - Compound nouns + possessive Vocabulary Grammar - Use of commas to make a list - Use of articles - Compound nouns	23
4.0	TRANSPORT AND TRAVEL	Language patterns - Almost + adjective - Too + for + to - Too + to	23

		Vocabulary Grammar - Prepositions - Adverbs of place - Adverbs of manner	
5.0	MARKET	Language patterns - Relative pronouns: who, which, whose, whom, that - Determiners: a, an, the - So...but Vocabulary Grammar - Adverbs frequency - conjunctions	20
6.0	STARTING A BUSINESS	Language patterns - Easy/ hard/ dangerous/ impossible + infinitive - Double imperatives - The use of likely/ certainly/ unlucky/ lucky Vocabulary Grammar -Tenses: past and present simple tenses	21

7.0	OCCUPATIONS	Language patterns As soon as + present future Make + direct object No ,sooner... than Vocabulary Grammar - Present continuous tense - Past continuous tense - Future continuous tense - Adjectives - Order of adjectives	24
8.0	CIVIL EDUCATION	Language patterns - Use of would like + to be + nominal - Almost + verb - Use of next/ across/opposite + to Vocabulary Grammar - Singular and plural nouns - Use of exclamation marks - Use of the comma in list	26
9.0	ENVIRONMENT	Language patterns - Use of have to/ had to	27

		- Use of common nouns - Adjectives + nouns Vocabulary Grammar - Common nouns - Adjective - Compounds words with some, any, no, every	
10.0	DRUG AND SUBSTANCE ABUSE	Language patterns Use of wonder + how Use .of understand/ see + where/ what/ why/ how Reflexive pronouns Vocabulary Grammar Adverbs of degree Past perfect tense Countable and uncountable nouns	27
11.0	CONFLICT RESOLUTION	Language patterns - Use of simple present tense for + nominal habitual actions - Show + nominal + how/ where/ what to - Use of too much/ many + nominal + + verb - Words with/ s/an/ s / sounds	27

		Vocabulary Grammar - Phrasal verbs with get - Active voice - passive voice - Regular verbs - Irregular verbs	
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KISWAHILI

MALENGO YA JUMLA YA KUFUNZA KISWAHILI KATIKA ELIMU YA WATU WAZIMA

Kufikia mwisho wa mafunzo haya, mwana kisomo aweze:

- Kuwasiliana kwa lugha ya Kiswahili katika maongezi na maandishi.
- Kutumia Kiswahili kukidhia shughuli na mahitaji yake ya kila siku.
- Kukithamini, kukifurahia na kukionea Kiswahili fahari kama lugha ya taifa.
- Kukuza maadili na haiba kupitia Kiswahili
- Kujiendeleza kielimu kwa kutumia Kiswahili
- Kutumia Kiswahili kuuthamini na kuuendeleza utamaduni ufaao.
- Kuwa nautambuzi na ufahamu katika Kiswahili ya maswala ibukana mambo mengine yanayoathiri jamii.
- Kutumia lugha ya Kiswahili kujiimarisha maishani kibinafsi, kifamilia na kijamii.

MUDA ULIOPENDEKEZWA KA KIANGO CHA PILI

NAMBARI YA MADA	ANWANI YA MADA	ANWANI

1.0	Maamkuzi na lugha ya heshima	20
2.0	Mazingira	22
3.0	Afya na lishe bora	21
4.0	Ujasirimali	22
5.0	Haki za kibinadamu	18
6.0	Migogoro na ujenzi wa Amani	21
7.0	Teknolojia ya kisasa	18
8.0	Maadili na ufisadi	23
9.0	Majanga	29
10.0	Elimu ya uraia	29
	Jumla	174

MATHEMATICS

GENERAL OBJECTIVES

By the end of the course, the learners should be able to:

- a) Show an understanding of numbers and numeration
- b) Demonstrate ability to perform the four basic operations
- c) Acquire skills in measurement, approximation and estimation
- d) Demonstrate special concepts and ability to use them
- e) Acquire the techniques of collecting, representing and interpreting data
- f) Display positive attitudes towards mathematics and make good use of the skills in the day to day activities
- g) Demonstrate techniques of investigation and problem solving strategies.

COURSE SUMMARY

Unit code	Unit title	hours
1.0	NUMBERS	
1.1	Whole numbers	25
1.2	Fractions	18
1.3	Decimals	18
2.0	MEASUREMENTS	
2.1	Length	15
2.2	Area	25
2.3	Volume	17
2.4	Capacity	21
2.5	Mass	16
2.6	Money	17
2.7	Time and speed	23
3.0	GEOMETRY	18
4.0	ALGEBRA	25
5.0	TABLES AND GRAPHS	19
6.0	SCALE DRAWING	19

SCIENCE

GENERAL OBJECTIVES OF ABET SCIENCE

By the end of the course, the learner should be able to:

- a) Demonstrate basic scientific knowledge
- b) Apply scientific skills to overcome life's challenges
- c) Demonstrate skills that enhance physical; and mental health

- d) Demonstrate ability to observe and explore the environment
- e) Demonstrate positive attitudes towards self, community and environment
- f) Manage and conserve available resources in the environment
- g) Improvise necessary devices for immediate use in their day to day lives
- h) Apply skills, knowledge and attitudes to develop income generating activities
- i) Demonstrate critical thinking and creativity in addressing emerging challenges
- j) Demonstrate interest in science and science related careers.

COURSE SUMMARY

CODE	MODULE UNIT	TIME (HOURS)
1.0	HUMAN BODY AND HEALTH EDUCATION	36
2.0	PLANTS	16
3.0	SOIL	8
4.0	ANIMALS	10
5.0	WATER	10
6.0	ENVIRONMENT	12
7.0	WEATHER	10
8.0	ENERGY AND MAKING WORK EASIER	50
9.0	PROPERTIES OF MATTER	32
TOTAL		184

SOCIAL STUDIES

GENERAL OBJECTIVES

By the end of the course, the learner should be able to:

- a) Acquire relevant knowledge, skills and attitudes
- b) Develop self-confidence, social values and positive behavior
- c) Nurture positive attitude towards good health and environmental conservation
- d) Recognize and understand the need for, and importance of interdependence of people and nations
- e) Understand and show appreciation for the love and loyalty to the nation of Kenya
- f) Develop the willingness and ability to resolve conflicts in the society
- g) Identify, initiate and promote economic activities in the society
- h) Understand and use simple map reading skills to interpret information
- i) Develop an understanding of human rights and responsibility to attain social justice
- j) Developed an understanding of the structure and functions of the government of Kenya and show ability to participate in its operations
- k) knowledge and skills necessary to understand and analyze, emerging issues which affect the quality of life
- l) Develop ability to observe, analyze, interpret and compare information for understanding issues, in the society
- m) Develop respect for Kenyans rich and varied cultures
- n) Develop awareness and appreciation of the role of technology in national development.

COURSE SUMMARY

Unit code	Unit title	Unit hours
1.0	PHYSICAL ENVIRONMENT	36
2.0	PEOPLE AND POPULATION	12
3.0	SOCIAL RELATIONS AND CULTURAL ACTIVITIES	10

4.0	RESOURCES AND ECONOMIC ACTIVITIES	78
5.0	POLITICAL DEVELOPMENT AND SYSTEMS	8
6.0	CITIZENSHIP	6
7.0	DEMOCRACY AND HUMAN RIGHTS	10
8.0	LAW, PEACE AND CONFLICT	6
9.0	GOVERNMENT OF KENYA	10

HOME CARE AND CRAFT

General objectives

By the end of the course, the learner should be able to:

- a) Practice safety measures in the home and the environment
- b) Adopt good health practices
- c) Appreciate the dangers associated with drug and substance abuse
- d) Acquire knowledge and skills necessary for home nursing
- e) Acquire and apply knowledge, skills and attitudes for proper care of the home
- f) Understand and appreciate the nutritive value of food
- g) Acquire and apply knowledge, skills and attitudes in food production
- h) Apply acquired knowledge, skills and attitude in tailoring
- i) Equip the learners with basic skills in the production of items of functional and aesthetic value
- j) Acquire knowledge, practical skills and attitude to start and manage income generating activities
- k) Develop appropriate social skills for coping with contemporary/ emerging issues

- 1) Develop knowledge, skills and attitudes that will lead to further training and gainful employment.

Module unit summary and time allocation

Code	Topic	Sub-topic	Theory (hrs)	Practice (hrs)	Total time (hrs)
1.0	Health education	Personal hygiene	1	3	4
		Environment hygiene	1	3	4
		Common accidents in the home and first aid			
			2	2	4
2.0	Home management	Housing the family	1	1	2
		Cleaning a house	2	6	8
		Fuels and sources of energy in the home	1	1	2
		Management of time and energy	1	3	4
3.0	Laundry work		2	8	10
4.0	Maternal and child health care		4	2	6

5.0	Nutrition	Nutritive value of food	2	2	4
		Deficiency diseases and disorders	2	2	4
		Food hygiene	2	2	4
6.0	Cookery	Kitchen equipment	1	1	2
		Methods of cooking	4	16	20
7.0	Tailoring / dressmaking	Sewing tools and equipment	2	2	4
			2	8	10
		Stitches	4	18	24
		Seams			
8.0	Home craft	Tie and die	2	8	*10
		Batik	2	8	*10
		Flower management	2	8	*10
		Crotcheting	2	8	*10
		Knitting	2	8	*10
		Embroidery	2	8	*10
			2	8	*10
9.0	Consumer education		1	1	2

***In topic 8.0, home craft, a learner will select any area of interest.**

BUSINESS EDUCATION

GENERAL OBJECTIVES OF BUSINESS EDUCATION

By the end of the course, the learner should be able to:

- a) appreciate the role of business support services

- b) acquire knowledge for further studies in business education
- c) acquire relevant knowledge, skills, positive attitudes and adapt new technology in operating business
- d) develop ability to identify, evaluate and select business opportunities taking into account contemporary issues and trends in business
- e) understand the need for ethical practices, self-discipline and positive attitude towards work
- f) appreciate local and foreign markets for goods and services
- g) Develop positive attitudes towards good health and environmental conservation.

MODULE SUMMARY AND TIME ALLOCATION

CODE	MODULE UNIT	SUB-MODULE UNIT	THEORY- (HRS)	PRACTICE (HRS)	TOTAL HOURS
1.0	Introduction to business education	Meaning of business education Meaning of the term business Meaning of business activity Types of business activity Benefits of business education	3	3	6
2.0	Business and self-employment	Meaning of self-employment Benefits of being self employed Reasons for people involvement in business	6	10	16
3.0	Business and its surroundings	Meaning of business surrounding Purpose of a business Factors that affect a business	8	12	20
4.0	Business	Meaning of business idea	8	14	22

	ideas and opportunities	Sources of business ideas Methods of generating business ideas Meaning of business opportunity determining business ideas that become business opportunity Business opportunities Determining suitability of selected business opportunity			
5.0	Forms of business ownership	Meaning of the term business ownership Forms of business ownership Meaning of one person business Benefits of one person business Meaning of partnership business Benefits of partnership business	8	12	20

6.0	Financing a small business	Meaning of finance Determining the amount of money required for a small business Sources of money for a small business	6	10	16
7.0	Starting and operating a small business	Factors considered in determining the type of business to start Factors considered in locating a business Legal requirement of a business	6	10	16
8.0	Keeping simple business records	Meaning of business records Types of business records for a small business Benefits of business records Meaning of profit and loss Calculation of profit and loss	8	16	24
9.0	Business support services	Meaning of business support services Types of business support services	8	10	18

		Means of transport Factors to consider when selecting a means of transport Types of bank accounts Benefits of operating a bank account Types of bank loans Methods of making payments through the banks Types of storage facilities Benefits of proper storage of goods			
10.0	Market for goods and services	Meaning of market and purpose of a market Common terms used in a market Places to buy and sell goods and services Factors considered in selecting a market	6	10	16
11.0	Resource management in small	Meaning of resource Meaning of management Methods of resource	4	6	10

	business	management in a small business effective uses of available resources in a small business			
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AGRICULTURE

General objectives

By the end of the course, the learner should be able to:

- Develop interest and positive attitude towards active participation in agriculture
- Acquire and improve practical knowledge, skills and competencies relevant in the day to day life
- Develop self-reliance, resourcefulness, in a sustainable problem solving ability and occupational outlook in agriculture
- Conserve and utilize the environmental resources in a sustainable manner
- Acquire basic knowledge for further training in agriculture

COURSE CONTENT AND TIME ALLOCATION

Code	Topic	Sub-topic	Theory hours	Practice hour	Total hours
1.0	introduction to agriculture	Meaning of agriculture Importance of agriculture Problems in agriculture Solving agriculture problems	6	2	8

2.0	Soil conservation	Measures of controlling soil erosion Importance of trees Selection of trees for agroforestry Establishing tree nursery	13	11	24
3.0	Water harvesting and storage	Importance of water harvesting and storage Methods of water harvesting and storage Construction of simple pond Water storage facilities	12	8	20
4.0	Crop production 1	Land preparation Selection of planting materials Planting Fertilizers	13	27	40
5.0	Farm tools and equipment	Maintenance of farm tools and equipment	4	6	10
6.0	Keeping animals for better production	Selection for breeding Signs and symptoms of ill health Control of parasites and diseases Livestock feeding Construction of animal house	26	14	40
7.0	Basic farm economics	Meaning of farm records Importance of farm records	8	10	18

		Types of farm records			
8.0	Agriculture and environment	Effects of agricultural refuse on environment Disposal of agricultural refuse Rubbish pit Establishing Homestead vegetation	11	13	24
TOTAL					184

Source: Republic of Kenya, 2009

C. An Abridged Version of ABET 111

ADULT BASIC EDUCATION AND TRAINING (ABET) LEVEL THREE

ENGLISH

GENERAL OBJECTIVES

By the end of the ABET III Course, the learner should be able to:

- a) Listen and respond effectively to issues concerning their daily lives
- b) Develop a desire to acquire and apply new language items in line with their daily needs
- c) Read and respond to messages on contemporary and emerging issues such as HIV and AIDS, gender, drug and substance abuse.
- d) Acquire life skills that should enable them to function better in the society
- e) Develop ability to continue reading and learning for information as well as for pleasure
- f) Develop ability to write in a logical manner on topical issues
- g) Develop ability to express ideas meaningfully, logically and legibly in correct English

COURSE SUMMARY

CODE	MODULE UNIT	SUB-MODULE UNIT	SUGGESTED TIME (HRS)
1.0	INTERPERSONAL RELATIONS	Language patterns Clauses introduced by who Clauses introduced by whose Use of.....as we as... Vocabulary Grammar Question tags modal/ auxiliary verbs Words with/s/and/	24

2.0	HEALTH AND HYGIENE	LANGUAGE PATTERNS Use of will +2 nd and 3 rd person Hardly.....when Vocabulary Grammar The suffixes Present participle Past participle	23
3.0	MEANS OF COMMUNICATION	Language pattern Not only.....but also Use of did/look/find + someone did something Use of found Vocabulary Grammar Prefixes: un-, im-, in-,out-, Conditional clauses: unless, if Use of brackets in writing	25
4.0	TRANSPORT AND TRAVEL	Language patterns Whether....or not Nominal + verb + adverb Vocabulary Grammar Abstract nouns	25

		Concrete nouns	
5.0	MARKET	Language pattern Either.....or Neither.....nor So.....that Words with sounds/p/and/b/ Vocabulary Grammar Collective nouns Relative clauses Perfect tense	25
6.0	STARTING AND MANAGING A BUSINESS	Language patterns Can't +help + keeping on doing something Wait for + nominal +infinitive Likely/ unlikely + to Vocabulary Grammar Reflexive pronouns Connectors Semi-colon	30
7.0	OCCUPATIONS	Language patterns Use of both and both Use of should	25

		Use of in spite of Use of despite the.... Vocabulary Grammar Use of phrasal verbs Pronunciation of the sound /h/ Countable nouns Uncountable nouns	
8.0	GAMES AND SPORTS	Language patterns Rather than Will and shall Almost + participle Word with /l/ and /r/ sounds Vocabulary Grammar Suffixes -ly Order of adjectives Apostrophe in singular nouns Apostrophe in plural nouns	25
9.0	CIVIC EDUCATION	Language patterns Present perfect continuous tense Participle + yet Should for obligation or probability Vocabulary	23

		Grammar Plural and singular Prepositions of moment Direct and indirect speeches	
10.0	DRUG AND SUBSTANCE ABUSE	Language patterns Positive and negative sentences Use of the +proper nouns Use of present perfect continuous Vocabulary Grammar Demonstrative pronouns Suffixes with –full Adverbs of manner Irregular verbs	25
11.0	CONFLICT RESOLUTION	Language patterns Present continuous Passive voice Use of in case/ if Use of will with 2 nd and 3 rd person Words with /t/ and /d/ sounds Vocabulary Grammar Use of apostrophe to show possession Use of colon	26

		Plurals of nouns ending in ‘f’	
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KISWAHILI

MALENGO YA JUMLA YA KUFUNZA KISWAHILI KATIKA ELIMU YA WATU WAZIMA

Kufika mwisho wa mafunzo haya, mwana kisomo aweze:

- Kuwasiliana kwa lugha ya Kiswahili katika mazungumzo na maandishi.
- Kutumia Kiswahili kukidhia shughuli na mahitaji ya kila siku.
- Kuthamini, kufurahia na kuongea Kiswahili fahari kama lugha ya taifa.
- Kukuza maadili na haiba.
- Kujiendeleza kielimu kwa kutumia Kiswahili.
- Kutumia Kiswahili kuuthamini na kuuendeleza utamaduni ufaao.
- Kuwa na utambuzi na ufahamu katika Kiswahili wa maswala ibuka na mambo mengine yanayoathiri jamii.
- Kutumia lugha ya Kiswahili kujiimarisha maishani kibinafsi, kifamilia na kijamii.

MUDA ULIOPENDEKEZWA KWA KIWANGO CHA TATU

NAMBARI YA MADA	ANWANI YA MADA	ANWANI
1.0	Maamkuzi na lugha ya heshima	20
2.0	Mizingira	22
3.0	Afya na lishe bora	21
4.0	Ujasiri mali	22
5.0	Haki za kibinadamu	18
6.0	Migogoro na ujenzi wa	21

	Amani	
7.0	Teknologia ya kisasa	18
8.0	Madili ya ufiisadi	23
9.0	Majanga	22
10.0	Elimu ya uraia	29
	JUMLA	174

MATHEMATICS

GENERAL OBJECTIVES

- a) By the end of the course, the learner should be able to:
- b) Show an understanding of numbers and numeration
- c) Demonstrate ability to perform the four basic operations
- d) Acquire skills in measurements, approximation and estimation
- e) Demonstrate spatial concepts and ability to use them.
- f) Acquire the techniques of collecting representing and interpreting data.
- g) Display positive attitudes towards mathematics and make good use of the skills in the day to day activities.
- h) Demonstrate techniques of investigation and problem solving strategies.

COURSE SUMMARY

UNIT CODE	UNIT TITLE	HOURS
1.0	NUMBERS	
1.1.0	WHOLE NUMBERS	38
1.2.0	FRACTIONS	21
1.3.0	DECIMALS	20
2.0	MEASUREMENTS	
2.1.0	LENGTH	14
2.2.0	AREA	18
2.3.0	VOLUME	15
2.4.0	CAPACITY	13
2.5.0	MASS	8
2.6.0	MONEY	18

2.7.0	TIME AND SPEED	21
3.0	GEOMETRY	24
4.0	ALGEBRA	18
5.0	TABLES AND GRAPHS	18
6.0	SCALE DRAWING	12
7.0	RATIO AND PROPORTION	18

SCIENCE

GENERAL OBJECTIVES OF ABET SCIENCE

By the end of the course, the learner should be able to:

- a) Demonstrate basic scientific knowledge
- b) Apply scientific skills to overcome life's challenges
- c) Demonstrate skills that enhance physical and mental health
- d) Demonstrate ability to observe and explore the environment
- e) Demonstrate positive attitudes towards self, community and environment
- f) Manage and conserve available resources in the environment
- g) Improvise necessary devices for immediate use in their day to day lives
- h) Apply skills, knowledge and attitudes to develop income generating activities
- i) Demonstrate critical thinking and creativity in addressing emerging challenges
- j) Demonstrate interest in Science and Science related careers.

COURSE SUMMARY

CODE	MODULE UNIT	TIME (HOURS)
1.0	HUMAN BODY AND HEALTH	38

	EDUCATION	
2.0	PLANTS	16
3.0	SOIL	6
4.0	ANIMALS	10
5.0	WATER	14
6.0	ENVIRONMENT	9
7.0	WEATHER	10
8.0	ENERGY AND MAKING WORK EASIER	49
9.0	PROPERTIES OF MATTER	32
	TOTAL	184

SOCIAL STUDIES

GENERAL OBJECTIVES

By the end of the course the learner should be able to:

- a) Acquire relevant knowledge, skills and attitudes
- b) Develop self-confidence, social values and positive behaviour.
- c) Nurture positive attitude towards good health and environmental conservation
- d) Recognize and understand the need for, and importance of interdependence of people and nations
- e) Understand and show appreciation for the love and loyalty of the nation of Kenya
- f) Develop the willingness and ability resolve conflicts in the society
- g) Identify, initiate and promote economic activities in the society
- h) Understand and use simple map reading skills to interpret information
- i) Develop an understanding of human rights and responsibility to attain social justice
- j) Develop an understanding of the structure and functions of the government of Kenya and show ability to participate in its operations
- k) Gain knowledge and skills necessary to understand and analyze, emerging issues which affect the quality of life
- l) Develop ability to observe, analyze, interpret and compare information for understanding issues, in the society
- m) Develop respect for Kenya's rich and varied cultures
- n) Develop awareness and appreciation of the role of technology in national development

COURSE SUMMARY

UNIT CODE	UNIT TITLE	UNIT HOURS
1.0	PHYSICAL ENVIRONMENT	36
2.0	PEOPLE AND POPULATION	12
3.0	SOCIAL RELATIONS AND CULTURAL ACTIVITIES	10
4.0	RESOURCES AND ECONOMIC ACTIVITIES	78
5.0	POLITICAL DEVELOPMENT AND SYSTEMS	8
6.0	CITIZENSHIP	6
7.0	DEMOCRACY AND HUMAN RIGHTS	10
8.0	LAW, PEACE AND CONFLICT RESOLUTION	6
9.0	GOVERNMENT OF KENYA	10

HEMECARE AND CRAFT

GENERAL OBJECTIVES

By the end of the module, the learners will be able to:

- Develop skills which will be responsive and relevant to his/her immediate needs
- Prepare the learner so that he/she can enter the world of work with confidence
- Impart adequate skills for further training.

COURSE SUMMARY

CO DE	TOPIC	SUB-TOPIC	THEO RY (HOUR S)	PRACTI CE (HOURS)	TOTAL TIME (HOUR S)
1.0	Health Education	home based care	2	2	4
2.0	Laundry Work	special treatment in laundry	2	4	6
3.0	Maternal And Child Health Care	post-natal care	2	4	6
4.0	Reproductive Health		2	2	4
5.0	Nutrition	lifestyle diseases	2	2	4
6.0	Cookery	Meal planning	6	4	30
		cake making	2	4	6
		cake decoration	2	4	6
		food preservation	2	4	6
		reheated foods	2	2	4
7.0	Tailoring/Dressmaking	Garment making	10	30	40
8.0	Home Craft	Soft furnishings	2	12	*14
		Weaving and basketry	2	12	*14
		Ornaments			
		pottery	2	12	*14
			2	12	*14
9.0	Consumer Education		1	1	2

BUSINESS EDUCATION

GENERAL OBJECTIVES OF BUSINESS EDUCATION

By the end of this module, the learner should be able to:

- a) Appreciate the role of business support services
- b) Acquire knowledge for further studies in business education
- c) Acquire relevant knowledge, skills, positive attitude and adapt new technology in operating business
- d) Develop ability to identify, evaluate and select business opportunities taking into account contemporary issues and trends in business
- e) Understand the need for ethical practices, self-discipline and positive attitude towards work
- f) Appreciate local and foreign markets for goods and services
- g) Develop positive attitudes towards good health and environmental conservation.

COURSE SUMMARY

CO DE	MODULE UNIT	SUB-MODULE UNIT	THOE RY (HRS)	PRACTI CE (HRS)	TOT AL
1.0	BUSINESS AND LOCAL COMMUNIT Y	Benefits of a small business to the local community Methods of keeping healthy business environment	4	10	14
2.0	FORMS OF BUSINESS OWNERSH IP	Meaning of a co-operative society Types of co-operative society Benefits of co-operative to a member Meaning of a limited company	6	10	16

		Types of limited companies Benefits of each type of limited company			
3.0	FINANCING A SMALL BUSINESS	Meaning of a loan Sources of loans Requirements for borrowing money from financial institutions	8	10	18
4.0	RECORD KEEPING IN SMALL BUSINESS	Meaning of common terms Two column cashbook Trading account Profit and loss account Balance sheet	10	14	24
5.0	BUSINESS SUPPORT SERVICES	Meaning of communication Means of communication Factors considered in choosing a suitable means of communication Benefits of communication to a business Meaning of insurance Types of insurance policies Benefits of insurance to a business	8	10	18
6.0	MARKETING OF GOODS AND SERVICES	Meaning of marketing Common terms used in marketing Methods of gathering market information for a small business			

	FOR A SMALL BUSINESS	Methods of attracting and retaining customer for a small business Factors considered when setting prices of goods and services			
7.0	RESOURCE MANAGEMENT IN SMALL BUSINESSES	Factors to consider when selecting business workers in a small business methods of managing workers in a small business meaning of property management types of business inventories in a small business benefits of effective time management	6	10	16
8.0	INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN SMALL BUSINESS	Meaning of ICT Types of business inventories in a small business Benefits of effective time management	5	7	12
9.0	EMERGING ISSUES AND TRENDS IN SMALL	Meaning of emerging issues and trends Emerging issues and trends of a small business	6	10	16

10.0	INVESTMENT OPPORTUNITIES	Meaning of investments Types of investments Benefits of investments Suitability of investments	6	10	16
11.0	SIMPLE BUSINESS PLAN	Meaning of a business plan Parts of business plan Benefits of business plan Preparation of a business plan by use of a template	6	10	16

AGRICULTURE MODULE II

GENERAL OBJECTIVES

By the end of this module, the learner should be able to:

- Acquire and improve practical knowledge, skills and competencies relevant in that day to day life
- Develop self- reliance, resourcefulness, problem solving ability and occupational outlook in agriculture
- Conserve and utilize the environmental resources in a sustainable manner
- Acquire basic knowledge for further training in agriculture
- Apply acquired skills and competencies in profitable and sustainable agricultural enterprises

COURSE SUMMARY

CODE	TOPIC	SUB-TOPIC	T HRS	P HRS	TOTAL HRS

1.0	Soil improvement and conservation	Qualities of a good farm manure Importance of organic manure Mulching Preparation of compost manure through compost heap method	8	10	18
2.0	Irrigation	Small scale irrigation method	2	10	12
3.0	Crop production II	Importance of nursery bed Citing a nursery bed Making a nursery bed Transplanting seedlings Field management practices Harvesting crops Preparation of crop produce for storage Importance of storing crop produce Storage facility for crop produce	15	25	40
4.0	Farm tools and equipment	Proper storage of farm tools and equipment Precautions taken while handling farm tools and equipment Construction of a tool rack	6	6	12
5.0	Farm structures	Citing farm structures Construction of a simple farm structure	7	11	18

		Maintenance of farm structures			
6.1	Rearing specific animals: chicken	Sources of chicks Raising chicks Management practices in chicken rearing Systems of rearing chicken	9	9	18
6.2	Rearing specific animals: pigs rearing	Practices in raising piglets Housing pigs Feeding pigs	8	10	18
6.3	Rearing specific animals: bee keeping	Bee hives Citing a bee hive Feeding bees Tools and equipment for harvesting honey Procedure for harvesting honey	9	9	18
6.4	Rearing specific animals: donkey/camel	Management practices Constructing donkey/camel harness	8	10	18
6.5	Rearing specific animals: fish farming	Citing a fish pond Construction of a fish pond Maintenance of a fish pond Sources of fingerings in Kenya Stocking a fish pond Feeding fish	14	4	18

		Methods of fishing in a pond Fish preservation			
7.1	Cattle rearing: ranch and range land cattle	Maintaining stock Hay making Parasite control in ranches and range lands	8	14	22
7.2	Cattle rearing: small scale cattle rearing	Grazing livestock Management practices Common pasture crops in Kenya Methods of pasture establishment Methods of pasture preservation	7	15	22
8.0	Farm economics and management	Sources of farm capital Marketing outlets for farm produce Agricultural support services Preparation of farm produce for marketing	6	4	10
9.0	Agriculture and environment	Use of farm chemicals Farm drainage system Producing clean farm products	10	6	16
	TOTAL				184

111 AN ABRIDGED VERSION OF KENYA POST-LITERACY CURRICULUM

KISWAHILI

Kusikiliza na kuongea Kusoma Kuandika Sarufi/matumizi ya lugha
ENGLISH Listening Speaking Reading Writing Grammar and language use
MATHEMATICS Measurements and weights Time Geometrical areas Numbers (Arabic and Roman) Mathematical operations Parts and portions Percentages Geometrical shapes Tables and graphs

AGRICULTURE
Farm plan
Soil management
Water conservation
Farm tools and equipments
Farm structures
Land preparation
Crop husbandry
Farm storage
Animal husbandry
Rangeland management
Marketing of farm products
Family diet
Farm management
Agricultural credit
Risk management in agriculture
HIV/AIDS and Agriculture
ENVIRONMENT AND HEALTH
Local resources in the ecosystems
Conservation of natural vegetation
Water pollution
Personal hygiene

Promoting personal hygiene in the family

Environmental hygiene

Bad sanitation and diseases balanced diet

Food deficiency

Food-borne infections and disorders

Immunizable diseases

Child survival and development

Safe home nursing

Common disasters and emergencies

Family planning

BUSINESS MANAGEMENT

Starting a business

Marketing of goods and services

Price determination

Business records

Bank support services

Business financing institutions

Investment opportunities

Business code of conduct

Determining trading results

Risk management storage of the business' goods

Transportation

Managing business personnel

Business and local community

Business and HIV/AIDS

APPLIED SCIENCE AND TECHNOLOGY

Weather variations

Seasons in the locality

Hazards related to weather

Appropriate forms of energy

Conserving energy in homes

Energy related hazards and accidents

Food processing

Food preservation

Simple machines

Safe use of tools and simple machines

Home structures

Communication facilities

CIVICS AND SOCIAL ETHICS

The family

Community activities

National activities

Conflicts in the community

Community resources management and conservation

Values and practices

Retrogressive cultural practices

Citizenship

Rights and freedoms

Leadership

Governance

Elections

Source: Department of Adult Education & Kenya Institute of Education

APPENDIX 111: Adult Teacher Education Curriculum

GENERAL OBJECTIVES OF ADULT TEACHER EDUCATION

By the end of the course, the teacher trainee should be able to:

1. Develop theoretical and practical knowledge about the teaching profession.
2. Demonstrate the ability to communicate effectively.
3. Enhance the learner's communicative skills.
4. Promote adult learners maximum potential through a variety of creative learning experiences.
5. Promote awareness among adult learners and members of the wider society in regard to their rights and civil duties.
6. Create awareness and promote appreciation of learners' national and international community.
7. Create awareness among adult learners on the economic opportunities available locally for entrepreneurship and production skills.
8. Promote the concept and practice of life-long learning.
9. Encourage positive behavior change among adult learners.
10. Nurture positive attitude towards good health and environmental conservation.
11. Promote social responsibility and optimal utilization of resources for sustainable development.

EDUCATION

INTRODUCTION

Education constitutes an integral component of the Adult Teacher Education Course (ATEC).

It aims at equipping the trainee with the necessary andragogical skills to effectively facilitate and professionally manage adult learning situations. The subject is designed to take two

years. However, the suggested duration in the course summary is only a guide and could be adjusted to the needs of the trainee. The following units are covered:

Foundations of Adult and Continuing Education

The foundation of Adult Education (AE) presents key concepts, information and principles that underlie the practice of Adult Education in the Kenyan context. It introduces the trainee to the concept of adult education. Specifically it focuses on the relationship between Adult Education and the social, economic and political development in Kenya. Other learning areas covered are: Policy, History, Philosophy, Sociology, as well as Comparative Adult Education.

Educational Psychology

Educational psychology helps the teacher to develop an understanding of behavior changes that come as a result of teaching and learning experiences in relation to the intended objectives. The purpose of this unit is to provide the trainee with knowledge, skills and attitudes to enable him/ her effectively handle adult learners with varied characteristics, needs and experiences.

The learning areas covered in this unit are: psychology of Adult learning, Approaches and methods of teaching adults, Guidance and Counseling, Life Skills Education, Special Needs Education and Basic Research in Education. Emerging issues have also been integrated which include: HIV and AIDS, Drugs and substance abuse, gender issues, Information Communication Technology (ICT) and integrity. This is to enable the trainee to be responsive to critical issues affecting the society.

Human Relations and Communication Skills

This unit is intended to provide the trainee with knowledge, attitudes and management skills that will enable harmonious interaction and effective communication with individual adult learners, groups, organizations and the wider society. The learning areas covered are: Working in Groups, leadership, Organizations, Partnerships and networking, Community learning Resource Centers and Communication Skills.

Curriculum Studies

This unit is intended to develop in the trainee skills in curriculum development, implementation and evaluation. It will also enable the trainee to identify, develop and use locally available learning resources. Further, the unit is intended to develop in the trainee to the concept and practice of assessing learning, monitoring and evaluating the effectiveness of Adult Education programmes.

The learning areas in this unit are: Curriculum development, Curriculum Interpretation, implementation, Educational measurement and Evaluation. A component of micro and practical teaching skills is included.

It is worth noting that, in all units, competences, learning experiences and learning resources are suggested. However, flexibility is allowable according to the needs of the trainees and learning settings. In addition, despite the fact that the learning areas are distinctive in nature and scope, they should be integrated in the training as much as possible to elicit their complimentary role in the Adult Teacher Education Course.

GENERAL OBJECTIVES

By the end of the course, the learner should be able to:

1. Develop awareness and appreciation of factors and trends that have influenced the development of adult education.

2. Develop practical knowledge, skills, attitudes and values towards the teaching profession.
3. Develop the ability to perform teaching duties with professional competence and commitment.
4. Build a firm foundation for lifelong learning.
5. Develop individual talents and skills for self-fulfillment.
6. Identify and provide support for adult learners with special needs in education.
7. Promote national unity, national development, social equality, patriotism and responsibility.
8. Foster understanding and respect for own and other people's culture in the contemporary society.
9. Apply basic principles in human relations in the management of adult learning centre.
10. Develop the ability to communicate effectively.
11. Develop awareness for innovations in the field of adult education and utilize them appropriately.
12. Employ a rational approach to problem solving through inquiry and research.
13. Demonstrate basic theoretical and practical knowledge about sociological issues that affect adult education in Kenya.
14. Develop awareness, competence and appreciation of positive environmental and health practices.
15. Develop awareness and appreciation of positive of positive environmental and health practices.
16. Develop awareness and appreciation of interrelationships among individuals, communities and nations.

COURSE SUMMARY

CODE	TOPICS	SUGGESTED TIME
YEAR 1		
1.0	FOUNDATIONS OF EDUCATION	
1.1.0	The Concept of Adult Education	6Hrs
1.2.0	The Policy of Adult Education	10Hrs
1.3.0	The History of Adult Education	12Hrs
1.4.0	Philosophy of Adult Education	12Hrs
1.5.0	Sociology of Adult Education	12Hrs
1.6.0	Comparative Adult Education	12Hrs
2.0	EDUCATIONAL PSYCHOLOGY	
2.1.0	Introduction to Educational psychology	6Hrs
2.2.0	Characteristics of Adult Learners	6Hrs
2.3.0	Adult learning	6Hrs
2.4.0	Approaches and Methods of teaching Adults	10Hrs
2.5.0	Guidance and Counseling	24Hrs
2.6.0	Life Skills Education	22Hrs
2.7.0	Special Needs Education	10Hrs
2.8.0	Basic Research in Education	10Hrs
3.0	HUMAN RELATIONS AND COMMUNICATION	
3.1.0	Introduction to Human relations	12Hrs
3.2.0	Working in groups	12hrs
3.3.0	Leadership	12Hrs
3.4.0	Organizations	12Hrs

YEAR 2		
3.5.0	Partnership and Networking	10Hrs
3.6.0	Community learning Resource Centers	8Hrs
3.7.0	Communication Skills	12Hrs
4.0	CURRICULUM STUDIES	
4.1.0	Curriculum Development	20Hrs
4.2.0	Curriculum Interpretation and Implementation	46Hrs
4.3.0	Educational Measurement and Evaluation	44Hrs
5.0	MICRO TEACHING	
	Micro Teaching	12Hrs
	Total Hours	360Hrs
6.0	TEACHING PRACTICE	

ENGLISH

GENERAL OBJECTIVES

By the end of the course, the learner should be able to:

1. Acquire sufficient knowledge, skills and attitudes of English to be able to interpret and implement the ABET English curriculum effectively.
2. Acquire mastery of English language for effective communication.
3. Use suitable approaches to teach, at ABET level, the English language skills of listening, speaking, reading and writing.
4. Use effective approaches and strategies to teach English grammar.
5. Appreciate and apply the functionality of the ABET syllabus to his or her teaching.
6. Read and analyse literary works.
7. Use professional documents in the teaching of the ABET English curriculum effectively.

8. Develop relevant skills to enable him or her assess and evaluate learners effectively.
9. Integrate emerging issues in his or her teaching.

COURSE SUMMARY

	NO.	TOPIC	TIME (Hrs)
YEAR 1	1.0	Language learning	6
	2.0	Speech work	10
	3.0	Grammar	18
	4.0	Approaches to teaching English in ABET 1	44
	5.0	Study Skills	48
	6.0	Writing	20
YEAR 11	7.0	Speech work	6
	8.0	Grammar	16
	9.0	Approaches to the teaching of English in ABET II and III	40
	10.0	The ABET English Syllabus	4
	11.0	Preparing to teach	16
	12.0	Evaluation of learners' work	12
	13.0	Micro teaching Teaching practice	1 week

KISWAHILI

**MALENGO YA JUMLA YA SOMO LA KISWAHILI KATIKA VYUO VYA ELIMU
YA WATU WAZIMA**

Kufikia mwisho wa kozi, mkurufunzi awe na uwezo wa:

- a. Kueleza umuhimu wa Kiswahili kama lugha ya taifa.
- b. Kuwawezesha wana kisomo kusikiliza na kuongea kwa Kiswahili.
- c. Kudumisha haiba katika mwingiliano wa mawasiliano.
- d. Kufunzi stadi na mahusiko mengine ya lugha.
- e. Kuwatia wana kisomo mshawasha na ari ya kuionea fahari lugha sanifu ya Kiswahili.
- f. Kuwanjengea wana kisomo msingi wa kutunga kazi za kisanaa kulingana na kiwango chao.
- g. Kuimarisha mazoea ya usomaji bora.
- h. Kuwatayarisha wana kisomo kukabiliana na aina zote za masomo.
- i. Kuwashirikisha wana kisomo katika kusuluhisha masuala ibuka
- j. Kutambua changamoto zinazokabili lugha ya Kiswahili na jinsi ya kukabiliana nazo.
- k. Kutambua umuhimu na athari za lugha ya kwanza dhidi ya ujifunzaji wa lugha ya Kiswahili.
- l. Kutumia vitumeme katika kuendeleza Kiswahili.
- m. Kutambua makosa ya jumla yanayojitokeza katika ujifunzaji wa Kiswahili na kuyarekebisha.
- n. Kujiendeleza na kuwaendeleza wana kisomo katika somo la Kiswahili.

MUDA ULIOPENDEKEZWA

MWAKA WA:	NAMBARI YA MADA	MADA	SAA
KWANZA	1.0	Dhana ya lugha	5
	2.0	Stadi za lugha	2
	3.0	Kusikiliza na kuzungumza	20
	4.0	Kusoma	30
	5.0	Kuandika	20
	6.0	Sarufi	35
	7.0	Zana za taaluma ya ualimu	4
	8.0	Nyenzo	2
	9.0	Tathmini	2
	10.0	Mbinu za kufundishia	24
PILI	11.0	Kusikiliza na kuzungumza	5
	12.0	Kusoma	30
	13.0	Kuandika	14
	14.0	Sarufi	35
	15.0	Zana za taaluma ya ualimu	12

MATHEMATICS

GENERAL OBJECTIVES

By the end of the course, the learner should be able to:

- Display an understanding of Adult Basic Education and Training (ABET) Mathematics curriculum.
- Develop knowledge and skills required in the teaching of Mathematics.

- c. Communicate effectively to adult learners using suitable Mathematical knowledge.
- d. Use appropriate teaching approaches according to the opportunities that may arise during the teaching/learning process.
- e. Develop positive attitudes towards the learning and teaching of Mathematics.
- f. Apply and relate Mathematics to real life situation.
- g. Promote in adult learners the development of economic opportunities through improved entrepreneurship and production skills.
- h. Address emerging issues in society including information communication technology in the teaching of Mathematics.

COURSE SUMMARY

	NO.	TOPIC	TIME ALLOCATION (Hrs.)
YEAR 1	1.	Whole Numbers	22hrs.
	2.	Fractions	12 hrs.
	3.	Decimals	10 hrs.
	4.	Length	7 hrs.
	5.	Area	9 hrs.
	6.	Volume	4 hrs.
	7.	Capacity	4 hrs.
	8.	Mass	3 hrs.
	9.	Business Arithmetic	6 hrs.
	10.	Time, Distance and Speed	4 hrs.
	11.	Geometry	8 hrs.

	12.	Algebra	4 hrs.
	13.	Tables and Graphs	5 hrs.
	14.	Scale Drawing	4 hrs.
	15.	Methodology I (Methods of Teaching mathematics)	15 hrs.
YEAR 2	1.	Whole Numbers	18 hrs.
	2.	Fractions	12 hrs.
	3.	Decimals	8 hrs.
	4.	Methodology II (Preparation for Teaching)	20 hrs.
	5.	Length	4 hrs.
	6.	Area	6 hrs.
	7.	Volume	4 hrs.
	8.	Capacity	4 hrs.
	9.	Business Arithmetic	8 hrs.
	10.	Time, Distance and Speed	6 hrs.
	11.	Geometry	13 hrs.
	12.	Algebra	5 hrs.
	13.	Tables and Graphs	7 hrs.
	14.	Ratio and proportion	5 hrs.

SCIENCE

GENERAL OBJECTIVES

By the end of the course, the learner should be able to:

1. Demonstrate adequate knowledge necessary for teaching Science to adult learners.
2. Demonstrate a positive attitude towards the teaching of Science.

3. Apply scientific skills and competences in solving day to day challenges.
4. Promote a positive attitude towards good health and environmental conservation.
5. Use available opportunities and resources to overcome life challenges.
6. Utilize scientific knowledge to contribute to national development.
7. Use varied strategies that will provoke learners to carry out scientific investigations.
8. Demonstrate creativity and critical thinking in addressing emerging challenges in the society.
9. Provide the adult learner with scientific knowledge and skills as a prerequisite for life-long learning.
10. Demonstrate creativity in the improvisation of learning resources using locally available materials.

COURSE SUMMARY

	TOPIC NO.	TOPIC	TIME ALLOCATION
YEAR I	1	Philosophy of Science	8hrs
	2	Methodology I	25hrs
	3	Health Education for Life	25hrs
	4	Plants, Fungi and their Importance	20hrs
	5	Animals and their Economic Importance	18hrs
	6	Weather and the Solar system	10hrs
	7	Environment	12hrs
	8	Properties of Matter	25hrs
		TOTAL	143Hrs
YEAR II	1	Human Body Systems and Heredity	28hrs

	2	Acids, Bases, Salts and their uses	15hrs
	3	Water and its Importance	8hrs
	4	Energy in Life	30hrs
	5	Making Work easier	15hrs
	6	Methodology II	10hrs
		Micro Teaching	2hrs
		Teaching Practice	1 school term
		TOTAL	108Hrs and 1 School term

SOCIAL STUDIES

GENERAL OBJECTIVES OF SOCIAL STUDIES

By the end of the course, the learner should be able to:

- Develop an understanding on the nature and scope of social studies.
- Acquire knowledge, appreciate and manage the environment sustainably for individual, national and international development
- Demonstrate and use map reading skills to interpret information
- Analyze population issues and how they affect the quality of life
- Identify, initiate and promote economic activities in the society
- Develop respect for Kenya's rich and varied cultures
- Develop the willingness and ability to resolve conflict peacefully in society
- Lobby, advocate and promote awareness on the importance of democracy in society
- Develop an understanding on the structure and functions of the government of Kenya
- Identify and appreciate the rights of an individual and responsibility to achieve social justice

- k. Develop ability to interpret, analyze and compare information for understanding issues in society
- l. Understand and show appreciation for the love and loyalty to the nation of Kenya
- m. Gain knowledge and skills necessary to understand and analyze emerging issues which affect the quality of life
- n. Develop awareness and appreciation of the role of technology in national development.

COURSE SUMMARY

	UNIT CODE	UNIT TITLE	UNIT HOURS
YEAR I	1.0	Nature and Scope of Social Studies	4
	2.0	Physical Environment	26
	3.0	People and Population	10
	4.0	Social Relations and Cultural Activities	4
	5.0	Resources and Economic Activities	54
	6.0	Political development and Systems	10
	7.0	Citizenship	6
	8.0	Government of Kenya	12
	9.0	Methods, Resources and Techniques of Teaching Social Studies	18
			144
YEAR II	1.0	Physical Environment	14
	2.0	People and Population	8
	3.0	Social Relations and Cultural Activities	6
	4.0	Resources and Economic Activities	34

	5.0	Political Development and Systems	6
	6.0	Democracy and human Rights	6
	7.0	Law, Peace and Conflict Resolution	6
	8.0	International Relations	8
	9.0	Methods, resources and Techniques of Teaching Social Studies	8
		Total	96

HEMOCARE AND CRAFT

GENERAL OBJECTIVES OF HEMOCARE AND CRAFT

By the end of the course, the learner should be able to:

- a. Acquire adequate knowledge, attitude and skills in homocare and craft which will enable the learner to competently handle Adult Basic Education Training Curriculum (ABET)
- b. Use locally available materials in the teaching of homocare and craft
- c. Identify opportunities for income generating activities for productive employment
- d. Apply knowledge, skills and attitudes to improve the standard of living for self, family and community.
- e. Use learning resources to promote learning of homocare and craft in adult learners.
- f. Develop creativity in addressing emerging issues in homocare and craft
- g. Foster practices that will enhance good health and environmental conservation
- h. Identify appropriate teaching methods for the relevant content
- i. Use knowledge and skills acquired as a foundation for further education and training

TOPIC SUMMARY AND TIME ALLOCATION

	CODE	TOPIC	SUB-TOPIC	HRS
YEAR I	1.0	INTRODUCTION TO HOMECARE AND CRAFT	Introduction to homecare and craft	1hr
	2.0	HEALTH EDUCATION	Personal hygiene Body parasites	4hrs 1hr
	3.0	ENVIRONMENTAL HYGIENE	Water Disposal of refuse Household pests Drainage Common accidents in the home	1hr 1hr 1hr 1hr 3hrs
	4.0	HOME MANAGEMENT	Housing the family Ventilation and lighting Care of the home Fuel Management of time and energy Special methods of teaching home management	2hrs 1hr 7hrs 1hr 1hr 1hr
	5.0	LAUNDRY WORK	Laundry work Special methods of teaching laundry work	6hrs 1hr
	6.0	MATERNAL AND CHILD HEALTH CARE	Parenthood Pregnancy Antenatal care	1hr 1hr 1hr

			Confinement	1hr
			Post-natal care	2hrs
			Reproduction health	2hrs
			Childhood diseases and ailments	3hrs
			Weaning	
			Habit training	2hrs
			Special methods of teaching	1hr
			maternal and child health care	1hr

	7.0	FOOD AND NUTRITION	Nutrition	1hr
			Nutritional deficiency diseases	2hrs
			Food hygiene	1hr
			Kitchen equipment	2hrs
			Cooking methods	5hrs
	8.0	TAILORING AND DRESSMAKING	Textiles	1hr
			Sewing tools and equipment	1hr
			Sewing machine	3hrs
			Stiches	3hrs
			Seams	3hrs
	9.0	HOME CRAFT	Tie and dye	4hrs
			Batik	4hrs
			Flower arrangement	4hrs

			Crocheting	4hrs
			Knitting	4hrs
			Embroidery	4hrs
YEAR II	10.0	CONSUMER EDUCATION	Consumer education	2hrs
			Consumer protection	1hr
			Special methods of teaching consumer education	1hr
	2.0	HEALTH EDUCATION	Home based care	2hrs
			Lifestyle diseases	2hrs
			Special methods of teaching health education	1hr
	7.0	FOODS AND NUTRITION	Cookery	8hrs
			Food preservation	2hrs
			Convenience foods	1hr
			Reheated dishes	2hrs
			Cake making	3hrs
			Cake decoration	3hrs
			Special methods of teaching foods and nutrition	1hr
	8.0	TAILORING AND DRESSMAKING	Garment making	17hrs
			Special methods of teaching clothing and	1hr

			textiles	
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	9.0	HOME CRAFT	Soft furnishings	4hrs
			Weaving and basketry	4hrs
			Ornaments	4hrs
			Pottery	4hrs
			Special methods of teaching home craft	1hr
	11.0	PREPARING TO TEACH	Preparing to teach	20hrs

BUSINESS EDUCATION

GENERAL OBJECTIVES

By the end of the course, the learner should be able to:

- Acquire general business knowledge, skills and develop positive attitudes that will enable him/her teach Adult Basic Education and Training (ABET) Business Education effectively.
- Develop ability for inquiry, critical thinking and rational judgment
- Understand and apply various methods of teaching Adult Basic Education and Training (ABET) Business Education
- Develop positive attitudes towards good health and environmental conservation
- Enhance cooperation and inter-relation in the society through business activities
- Appreciate the need for ethical practices, self-discipline and positive attitude towards work
- Build a firm foundation for further education and training in Business related fields
- Develop ability to identify, evaluate and select business opportunities taking into account contemporary issues and trends in Business

COURSE SUMMARY AND TIME ALLOCATION

	CO DE	TOPIC	SUB-TOPIC	H RS
YE AR I	1.0	INTRODUCTI ON TO BUSINESS EDUCATION	Meaning of Business Education Types of business activities Importance of Business Education	3
	2.0	BUSINESS AND IT'S ENVIRONME NT	Meaning of business environment Types of business environment Factors that affect a business Benefits of a business to a community Trends in business environment	7
	3.0	ENTREPRENE URSHIP	Meaning of terms used in entrepreneurship - Entrepreneurship - Intrapreneur - Entrepreneur - Employment - Self employment - Business idea - Business opportunities Advantage and disadvantage of self employment Reasons for people involvement in a business	20

			Characteristics of an entrepreneur Functions of an entrepreneur	
			Sources of business idea Business opportunities Determining business ideas that become business opportunities Determining the sustainability of selected business opportunities Emerging issues and trends in entrepreneurship	
	4.0	FORMS OF BUSINESS UNITS	Sole proprietorship Partnership Co-operative societies Joint stock companies	20
	5.0	BUSINESS FINANCE	Meaning of business finance Source of business finance	10
	6.0	TRANSPORT	Meaning of transport Elements of transport Modes of transport Means of transport Importance of transport Factors considered in selecting a means of transport Trends in transport	5

7.0	WAREHOUSING	Meaning of warehousing Essentials of a warehouse Types of warehouse Importance of warehousing Trends in warehousing	4
8.0	INSURANCE	Meaning of insurance Common terms used in insurance Meaning of pooling of risks Principles of insurance Types of insurance Procedure of obtaining an insurance policy Procedure of making insurance claim Trends in insurance	6
9.0	MONEY AND BANKING	Meaning of money Characteristics of money Functions of money Meaning of banks Types of banks Functions of commercial banks Types of bank accounts Trends in banking	6
10.0	COMMUNICATION	Meaning of communication Essentials of effective communication	5

		Forms of communication Means of communication Barriers of effective communication Importance of communication Services that facilitate communication Factors considered in choosing means of communication Trends in communication	
11.	SUBJEC	Teaching methods	2
0	T	- Discussion	2
	METHO	- Question and	
	DS	answer	
		- Debating	
		- Brainstorming	
		- Resource person	
		- Demonstration	
		- Case study	
		- Field visit	
		- Role play	
		- Practical work	
		Teaching and learning resources	
		- Specimen	
		documents	
		- Charts	

			- Resource person - ABET Business Education syllabus - Handbook - Business magazine - Business journal - Business environment	
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		Factors influencing choice of appropriate teaching and learning resources Preparation of teaching and learning resources Use of teaching and learning resources	
	TOTAL		10
	L		8

YEA R II	12.0	LOCATI ON AND SIZE OF A BUSINE SS	Factors that influence location of a business Factors that determine the size of a business	2
	13.0	NET WORTH OF A BUSINE	Meaning of related terms - Book keeping - Accounting - Assets	8

		SS	- Liabilities - Capital Book keeping equation Networth of a business Simple balance sheet Effects of transaction on a balance sheet	
	14.0	THE LEDGER	Meaning of a ledger Meaning of double entry Preparation of a ledger account	

			Procedure of balancing a ledger account Balancing off a ledger account Extraction of a trial balance from the ledger account balances Purposes and limitations of a trial balance	
	15.0	FINANCIAL STATEMENTS	Meaning of trading profit and loss account Preparation of a trading account Preparation of profit and loss account Determination of the initial and final capital of a business Preparation of final balance sheet	6
	16.0	THE CASH BOOKS	Meaning of a cash book Purpose of a cash book Contra entry Types of cash books	8
	1	PRODUCT	Meaning of production promotion	

	7 . 0	PROMOTION	Methods of product promotion - Sales promoting - Personal selling - Advertising - Publicity - Public relation	
			Importance of product promotion Factors that influence choice of product production method Trends in product promotion	
18. 0		INFORMATIO N AND COMMUNIC ATION TECHNOLOG Y (ICT)	Meaning of Information of Communication Technology (ICT) ICT equipment Importance of ICT to a business	
19. 0		RESOURCE MANAGEME NT AND ECONOMIC ISSUES	Meaning of business resource management Methods of business resource management Importance of business resource management Factors to consider when selecting resources Benefits of effective time management in business Business inventory Economic issues in Kenya - Meaning of an economy	

			- Economic growth - Economic development - Inflation - employment and unemployment	
20.0	BUSINESS PLAN	Meaning of a business plan Components of a business plan Benefits of a business plan Importance of a business plan	4	
21.0	PREPARATION TO TEACH	Introduction to ABET Business Education Syllabus - Components of ABET Business Education Syllabus - Importance of ABET Business Education syllabus - Interpretation of ABET Business Education syllabus Professional documents used in teaching Business Education - Business Education schemes of work - Business Education lesson plan and lesson notes - Business Education record of work - Preparation of professional documents	16	

		Assessment	
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		- Meaning of assessment - Types of tests - Administration of tests - Marking of tests and recording of scores in a progress record	
		TOTAL	72hrs
		TEACHING PRACTICE	36hrs

AGRICULTURE

GENERAL OBJECTIVES

By the end of the course, the teacher trainee should be able to:

- a. Communicate and inculcate agricultural knowledge and skills to learners
- b. Contribute to national agricultural production by using available resources
- c. Stimulate genuine interest and develop positive attitude leading towards active participation in Agriculture
- d. Assist learners to practically acquire agricultural knowledge and skills which are relevant and useful to their lives
- e. Integrate emerging issues in teaching and learning of Agriculture
- f. Acquire knowledge for further training in Agriculture

AGRICULTURE COURSE SUMMARY

YEAR		TOPIC	TIME
1	1.0	General introduction to Agriculture	4hrs
	2.0	Soil conservation and improvement	12hrs
	3.0	Water harvesting, storage and utilization	8hrs
	4.0	Principles of crop production	24hrs
	5.0	Farm tools and equipment	8hrs
	6.0	Principles of livestock production	36hrs
	7.0	Agriculture and Environment	4hrs
	8.0	Special methods for teaching Agriculture	13hrs
2	1.0	Agro-forestry	10hrs
	2.0	Pastures	12hrs
	3.0	Farm structures	10hrs

	4.0	Agricultural economics	14hrs
	5.0	Preparation for teaching Agriculture to adult learners	15hrs
	6.0	Practical approach to Agriculture for adult learners	10hrs
		TOTAL TIME	180hrs

Source: Republic of Kenya, 2010.