# EFFECTIVENESS OF STRUCTURED GROUP LEARNING MODEL IN ENHANCING ACQUISITION OF SELECTED VOCATIONAL, EMPLOYABILITY AND LIFELONG LEARNING SKILLS AMONG THE VULNERABLE YOUTH IN NAKURU COUNTY, KENYA

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A thesis submitted to Graduate school in partial fulfillment of the requirements for the Doctor of Philosophy degree in Community Studies and Extension of Egerton University

EGERTON UNIVERSITY
APRIL 2019

# **DECLARATION AND RECOMMENDATION**

# **Declaration**

I hereby declare that this is my original work and has not been	n presented for an award of
degree or diploma in any other university.	
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# **DEDICATION**

This thesis is dedicated to my late parents Mr. Ishmael Kang'ang'i and Mrs. Veronicah Wanjiru who gave me a chance to education though they did not have it. Their determination inspired me to a culture of working hard and diligence. Gratitude to my husband Joseph Kamau, my children Bilha, Roland, Caleb and my grandchild Timonah for their patience and support throughout my many years of study. May God bless you all.

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#### **ABSTRACT**

The youth regardless of their social background require skills to help them earn a livelihood and participate in National development. Vocational, employability and lifelong learning skills could help out of school youth raise their self-concept and increase their chances to engage in socio economic activities and contribute positively to their personal development. Based on this premise this study intended to introduce Structured Group Based Learning Model (SGLM) and establish its effectiveness in enhancing acquisition of vocational, employability and lifelong learning skills among the vulnerable youth in Nakuru County. Quasi experimental research design with two non-equivalent groups was used on the already constituted vulnerable youth groups. The study involved groups in Molo, Njoro, Subukia and Nakuru East Sub Counties. The target population of the study was (300) constituting 10 vulnerable youth groups in Nakuru County, but the accessible population was only (120) from four groups with characteristics that suited the study. Purposive sampling was used to select four groups of vulnerable youth. The sample size was 60 members drawn from the four groups. Two groups of 30 members each were used for treatment and control. questionnaire for trainers and trainees was used to collect preliminary data before the training, a questionnaire on challenges encountered during the training while observation check list was used for posttest after the training. The treatment group was trained through SGLM while the control group was trained through traditional methods. Content validity was ascertained by experts from the department. The instruments were pilot tested and a reliability coefficient of 0.89 was obtained. Data obtained from post testing was categorical which was analyzed using descriptive statistic and inferential statistics with the help of a Statistical Package for Social Sciences (SPSS) version 22. The categorical data was then transformed to continuous data to enable a t-test for independent samples. Pearson chi square was used to test for association while t-test for independent samples was used test for difference between the training methods used. A significance level of  $\alpha$  0.05 was set for the study. The study found that SGLM had a statistically significant association with acquisition of specific attributes in vocational, employability and lifelong learning skills. However there was no significant association between SGLM and acquisition of some attributes of vocational and lifelong learning skills. The method may be adopted by community trainers and organizations involved in youth empowerment and rehabilitation programs. As it gives a social approach to learning and triggers the development of some aspects of behavioral change in trainees especially the vulnerable youth.

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# LIST OF ACRONYMS AND ABBREVIATIONS

**GBL** Group Based Learning

**GOK** Government of Kenya

**ILO** International Labour Organization

**LLs** Lifelong Learning Skills

**NIT** National Institute of Technology

**NGOS** Non-Governmental Organizations

**SGLM** Structured Group Learning Model

**ES** Employability Skills

**UNESCO** United Nations Education Scientific and Cultural Organization

**UNDP** United Nations Development Program

**UNICEF** United Nations Children's Fund

VS Vocational Skills

#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.1 Background of the Study

Investments made in youth education and training according to UNESCO (2012), have not translated into jobs creation and sustainable livelihoods for the youth. This is partly due to the fact that low income groups tend not to participate in full time training programs because of high training fees and the opportunity costs of long training durations. Young people, who drop out of school before completing basic education, constitute majority of the youth and their training have not been adequately addressed.

UNESCO, 2012 report further envisages that the youth, regardless of their social background require skills to prepare them for engagement in sustainable livelihoods. Research has shown that education and training among the youth does not only result to employment and promotions or financial gains but has social benefits especially to the disadvantaged groups such as: increased social cohesion and inclusion, tolerance, reduced crime, strengthened social capital, active citizenship, civic and political participation as well as increased participation in community service and technological changes (Griffin, 2016).

In most countries of the world, youth training and skills development has been among the key government agenda in terms of policies, programs and initiatives launched to address youth unemployment and crime. However the results achieved especially in developing countries may have mostly benefited the urban and elite youth closing out the rural and vulnerable youth, though they share the same obligations.

United Nations (2005), reports on a program in Mexico known as Young Rural Entrepreneur and Land Fund (YRELF) which begun in 2004 targeting indigenous groups and aimed at improving their skills and promoting sustainable income. Training for Rural Economic Empowerment (TREE) is a similar initiative in Bangladesh which aims at matching skills supply to labour demand for youth and women groups and has been successful in enhancing their skills on a wider context (International Labour Organization (ILO), 2008). In Uganda a nongovernmental organization known as Swiss Contact has also through group based learning provided an opportunity for non-formal learners to get skills and competences that are traditionally acquired through institutionalized training. The training has in return improved the social and economic involvement of the participants (Gwamoiza, Haidara & Schniepper, 2013). These are successful initiatives which have been achieved through group based learning approaches.

In Kenya a youth is described as any persons between the age of 18 years and 35 (Government of Kenya (GoK), 2010; Ombagi, 2012). This age is determined by the level at which they transition between education and labour market. About 72.4% of the national population constitutes of youth, out of which 28.4% are male and 44% are female. Majority (12.8 million) of the youth are economically inactive due to unemployment or lack of appropriate skills as revealed in the 2009 Kenya census report (Kenya National Bureau of Statistics (KNBS), 2010).

The key challenges facing the Kenyan youth is lack of necessary education and relevant training which could lead to knowledge and skills required to enhance their absorption into the labour market especially among the vulnerable youth (Omolo, 2010). United Nations Educational Scientific and Cultural Organization, (UNESCO) (2012) points out that a large population of unemployed youth in Kenya are found in semi urban and rural areas. Therefore skills development through formal, informal or non-formal training is vital to address unemployment, inequality, poverty and promote positive youth development.

To achieve Kenya's Vision 2030 on industrial development, the youth provide the bedrock for transformation of the necessary human resource skills for technological and industrial take off (Government of Kenya (GOK), 2008). Kenya National Youth Policy (NYP) envisioned equitable distribution of resources and accessibility of socio-economic opportunities to all youth. The policy also proposes to improve affordability and accessibility of quality education at all levels of schooling and promote non-formal education, life skills development and vocational training (GOK, 2006). The vulnerable youth in Kenya are also entitled to empowerment opportunities like their counterparts. To this end, little has been done to promote non formal education and training which would in return accommodate the vulnerable youth. Consequently, Kenya need a 'skills' training program that accommodates the youth at all levels, to enhance productivity in the small, medium and micro enterprises that employ majority of the less educated youth (Wanjubi, 2011).

In Kenya, the guiding policy on youth training is not clear as to how the youth who have dropped out of school could be empowered through education and training. Their training is done haphazardly by community developers or government extension officers and nongovernmental organizations, who mostly benefit those in urban set ups. Training organizations targeting vulnerable youth emphasize on providing managerial and business skills rather than vocational, transferable and lifelong learning skills, which are critical for successful entrepreneurship (Maina, 2010). In addition they tend to use transmissive methods

(verbal expositions and demonstrations) during training as used in classroom situation and emphasize on cognitive skills.

Lack of vocational, transferable and lifelong learning skills have been identified as a major cause of youth disintegration and unemployment among other factors (United Nations Development Program (UNDP), 2012). Training in vocational skills is therefore important in nurturing talents, developing youth entrepreneurs and their subsequent engagements in sustainable livelihoods (Kamau & Wamutitu, 2010).

In Kenya, growing number of these youths are engaged in informal businesses and earn very little to sustain themselves and their families. The challenge is aggravated by lack of work related experience and specific transferable skills that allow them fit in all social and work situations (Ombagi, 2012). Since 2011, the Kenya government has put in place several initiatives such as revolving youth fund, *Uwezo* fund and youth enterprise development fund (YEDF) to expand access to credit and encourage the growth of micro and small-enterprises (MSEs) owned by the youth. These programs were launched to provide youth groups with funds to enable this important sub-sector support industrialization, enhance self-employment opportunities and economic growth (UNICEF, 2011). Access to *Uwezo* fund is given to registered groups that have been in existence for at least six months with a membership of 15-35. The Ministry of Devolution and Planning has been conducting capacity building programs to prepare and support potential *Uwezo* Fund beneficiaries and the training program takes 3 months for the interested groups. These initiatives only benefit the urban and rural elite youth while the vulnerable and school dropouts have no information neither can they access the funds.

GOK (2013) youth development report explains that youth empowerment initiatives offer skills training programs in business management, public procurement procedures, Basic computer skills, HIV and AIDS and table banking, however UNESCO (2012) suggest that combining microfinance skills with vocational, transferable skills and lifelong learning offers successful in mitigation of the multiple forms of disadvantages that lock the youth into poverty, and provoke their creativity and innovation making them more productive.

Vocational skills (VS) refer to skills that enable a person carry out a specific job practically. It involves application of manipulative skills on materials to produce a tangible product. The skills are either imparted through formal, apprenticeship, informal and nonformal programs. The government of Kenya has embarked on promoting access to vocational skills through supporting vocational and technical institutions with resources to increase

youth enrolment (youth congress, 2015). However the vulnerable youth may not benefit from this initiative as they do not meet the admission criteria. Crafts are indigenous skills in the vocational skills category and are passed on through social interactions with artisans or master craftsmen where the trainee may not have had any basic education, the learning takes place through observing, modeling and repeating the behavior and such programs would benefit the vulnerable youth (GoK, 2013).

Vocational skills are classified into two categories; Occupational skills which are generic and not trade specific but enable a person to observe certain standards, choose appropriate materials, techniques, handle tools and observe health and safety in the work place and are crucial in vocational practice. The second category is craft skills which refer to trade specific knowledge of manipulative/ practical skills to produce handmade items and can be passed on from one person to another (Mashantile, 2011). Mastery in these skills help to interpret verbal instructions into designs and develop specifications including ability to manipulate materials and techniques to produce specific hand made products (UNDP, 2011). Vocational competences play a key role in promoting economic competitiveness and prosperity in a nation while enhancing social cohesion and self- efficacy among the trainees (Finish National Board of Education (FNBE), 2012). This in return reduces the economic gap and enhances social inclusion; therefore effective vocational skills training programs for the vulnerable youth is vital. These youth lack training in team building and interpersonal skills which are crucial in sustaining the group activities, because extension workers and community development officers concentrate on entrepreneurship and business management skills.

UNESCO (2012) defines Employability skills (ES) as life skills required to enable the youth improve their chances for self-development and adapt to different work environment and may be acquired through social interaction. ES are critical in the holistic development of trainees in vocational program hence trainers should embrace a training strategy that helps inculcate the skills (Matthias, et.al 2013). Employability skills enhance acquisition of latent skills such as decision making, interpersonal relations, communication skills, team work, problem solving and creativity. ES could motivate out of school youth to be more productive and successful in their engagements.

Lifelong learning skills (LLS) is a deliberate, systematic and sustained effort to transmit, acquire knowledge, attitudes, values and skills as well as any other outcome of that effort that shapes the development of the person across the life-span. European commission

(2014) defines the term as learning new things throughout ones' life particularly after completing initial formal education. LLS enable a person seek and access information related to their engagements and interests, keeps one informed and in touch with new developments (Mayer & Tschapka, 2008). Enhanced vocational, employability and lifelong learning skills would make the vulnerable youth economically, socially and technologically relevant as they seek to find their space in the society and take control of the individual development. Cox (2009) points out that the skills can be transferred informally through interactive learning, experiences an approach that suits well the target of this study.

The vulnerable youth are disadvantaged victims of risk factors such as; family poverty, low parental education, living in single or no parent households, having a child before age 18, drop out of primary and secondary school education, learning disabilities and other related conditions which disconnect them from the society and school system. As they mature the youth develop a desire to engage with some form of education and training or even income generating activities but the rigid nature of most education and training systems may not accommodate them hence the need for alternative training models and skills development as observed by Zweig (2003).

Vulnerable youths are involved in survivalist enterprises, which are undefined activities by people unable to find paid jobs or get into an economic sector of their choice. The activities include hawking and other menial jobs subjecting them to a life of poverty. Income generated from these activities usually fall far below the minimum income standard, with little or no capital investment or specific skills. Such activities have limited opportunities for growth into viable businesses (UNICEF, 2011). This is the category which most of the vulnerable youth groups fall as the income generated is inadequate to sustain them.

Kendoll and Harrison (2007), observes that group based learning not only enhances skills acquisition but also help the youth develop their creativity, interpersonal relationships and identify economic opportunities where they did not perceive any before. The members collectively perceive training as an opportunity to change their situation once characterized by poverty and hardship. Group training has been adopted in many countries both for youth and women empowerment programs.

As envisaged in Kenya national youth policy (GoK, 2007) education and training should promote and facilitate individual development and self-fulfillment by providing opportunities for developing individual personality, intellectual abilities, talents and character

building. It should foster desirable moral and integrity levels to help the youth grow into honest, hardworking, self-reliant and disciplined patriotic citizens. This may be possible for those in education and training programs as the curriculum is developed to ensure broad based skills, but excludes the youth who are outside the school system. Their engagement and attendance in alternative education and training programs is a key pathway to future life opportunities and also reduces the likelihood of engaging in high-risk or antisocial behavior (Zurcher, et al. 2014).

From the foregoing discussion, a deliberate intervention should be put in place to include the out of school youth in the empowerment training programs for sustainable livelihood. In Kenya youth development through training is carried out by several stakeholders among them government ministries, private and religious organizations through formal, informal or non-formal programs. Most of the training programs are institutionalized, hence locking out those not in the system.

Initiatives addressing youth issues in Kenya prefer to deal with groups and this provides a good environment for group based learning. Grugulis (2008) notes that groups and cooperative associations help members gain skills while strengthen their common voice. Like adults, vulnerable youth are aware of specific learning needs generated by real-life challenges such as antisocial behavior, dysfunctional families, marriage, divorce, parenting and poverty. The learners' needs and interests are the starting points and serve as guide posts for designing the training activities. To train these groups, an interactive approach needs to be adopted as the aim is mostly to address the cognitive and affective abilities.

Group based learning (GBL) is an instructional method that simulates a social environment and provides a more participatory non formal approach to knowledge, attitudes and skills transfer. The methods used allow the learner to participate in planning, formulate objectives and direct the learning process hence promoting ownership, confidence, self-expression and acquisition of skills among the learners. It gives the learner an opportunity to choose what to learn, when and where thus owning and directing the learning process (Eison, 2010). In traditional methods of training such as lecture and demonstration the learner is a passive listener and observer while the content is chosen by the trainer who also controls the learning process. GBL equips the learner with experiences that cannot be learnt in class yet very vital in everyday life and links the learner to real world situation as they apply the skills across a range of context. The trainee pursues the interest of the group as well as group objectives as opposed to individual interest (Cheong, 2010). A relationship of trust between

the trainer and trainees is likely to develop while working together and discussing aspects at various stages of the training process. The trainer becomes a participant in the learning process, providing mentorship rather than the source of knowledge. The trainer builds relationships by managing the group behaviour which affects the group learning process (Faraday, Overton & Cooper, 2011).

Improved training methods have evolved to support learning and provide opportunities for trainees to direct their learning, develop their innovative and problem solving abilities as they interact with the learning resources as the trainer facilitates the process (Subong, 2010). Kenya government through the ministry of education science and technology has put in place several interventions. Despite all these efforts, unemployment and poverty still keep the majority of the youth away from contributing to national development due to lack of relevant skills and access to information (UNDP, 2012). This study has been necessitated by the need to support the government initiative to empower all the youth through skills training and information literacy, which will enable them engage in self and national development, hence the concern for the out of school youth.

The total population of vulnerable youth in the county is unknown and readily unidentifiable Nakuru County has 10 identified vulnerable youth groups who are mainly assisted by church and Non-governmental organizations. These youth have formed groups to give psycho socio support to members and income generating activities. Some members have been trained in entrepreneurial skills. The trainings are mostly conducted through workshops where the presenters use either transactive method to deliver the content. However the skills have not translated to group cohesion or increased income and sustainable livelihoods for the members, meaning that other interventions are required. There is enough research evidence that working in groups may foster positive youth development through programs that help them acquire skills, attitudes, and behaviors required to achieve the characteristics necessary for personal growth. The youth in Nakuru are trained using traditional skills resulting to low acquisition of skills, hence the need to introduce group based learning to improve acquisition.

This study recognizes the instructional process in skills training as vital in supporting the out of school youth in their aspirations. For effective training among these youth groups, there is need to try a more interactive and transformative methods of training other than the traditional ones used in schools. The main objective of training is to use the skills and improve the quality of their lives other than certification. It is no secret that formal training

has not been able to cater for all the skills need of the youth, hence the need to identify an alternative and more inclusive method to accommodate the various categories.

Group based learning has been identified as promoting acquisition of broad based skills especially in non-formal programs. The implementation of GBL was structured based of the nature of the content and group members and the training objectives to achieve the desired outcome hence the adoption of the term Structured Group Learning model (SGLM). When properly organized, the model can enhance the transfer of latent skills as intended by this study. The study was done to determine the effectiveness of SGLM in the acquisition of selected skills among the vulnerable youth in Nakuru County.

#### 1.2 Statement of the Problem

The future of any nation depends on the ability of its young people to make positive contribution to the society. The youth in Kenya through the national youth policy are obligated to contribute towards positive self and national development. However the vulnerable youth may not be able to fulfill this obligation due to lack of access to appropriate skills training opportunities. Most of the initiatives for youth empowerment benefit the elite and the urban youth who have access to information and facilities as well as support from parents and community but not the rural and vulnerable youth. Majority of the vulnerable youth are those who dropped out of school and from the social fabric due to various reasons. They do not receive any form of support or care from parents or government. Disconnection from school and skills training programs has interfered with their successful transition to adulthood yet they are expected to contribute positively to the society and their own development like all the other youth.

In Nakuru County most of the youth initiatives by the Government or NGOs target the youth who have finished schools or youth who are in church youth groups or those identified by the department of gender or government ministry dealing with youth training and development. Vulnerable youth are not easily identified, hence they are left out of the national and county government youth empowerment policy or special groups' initiatives, yet they share the same obligations with the other youth to contribute towards self and national development. It is also important to acknowledge that vulnerable have the ability to achieve their life goals if given appropriate training opportunities and support. In return they would be able to enhance their social skills and engage in activities that lead to sustainable livelihoods. Although there are several youth empowerment initiatives through group training

programs in Nakuru County, the effectiveness of the training programs have not been established especially among the vulnerable youth in terms of acquisition of skills that would help them lead productive lives and engage positively with the community. The role of training methods is important as it bridges the gap between the trainee, the content and the trainer. There are transformative methods that would address the skills need among the vulnerable youth groups. However little has been done to establish the most appropriate methods to train the vulnerable. It is therefore necessary to introduce structured group learning model and determine the effectiveness of the methods in acquisition of vocational, employability and lifelong learning skills among vulnerable youth in Nakuru County.

#### 1.3 Purpose of the Study

The purpose of the study was to introduce Structured Group Learning Model to train the vulnerable youth groups on selected skills and determine the effectiveness of the method in association to acquisition of vocational (handicrafts), employability and lifelong learning skills among the youth.

# 1.4 Objectives of the Study

The following objectives guided the study:

- 1. To establish the training methods used by youth trainers in Nakuru county.
- 2. To determine the association between Structured Group Learning Model (SGLM) and acquisition of vocational skills among the vulnerable youth and those trained through traditional methods in Nakuru County
- 3. To determine association between Structured Group Learning Model (SGLM) and acquisition of employability skills among the vulnerable youth and those trained through traditional methods in Nakuru County.
- 4. To determine the association between Structured Group Learning Model (SGLM) and acquisition of lifelong learning skills among the vulnerable youth and those trained through traditional methods in Nakuru County.
- 5. To identify the challenges encountered when using SGLM while training vulnerable youth in Nakuru County

#### 1.5 Hypotheses of the Study

The following null hypotheses from objectives 2, 3 and 4 were tested at 0.05 significant level.

- H<sub>0</sub>1 There is no statistically significant association between SGLM and acquisition of vocational skills among the vulnerable youth and those taught using traditional methods in Nakuru County.
- H<sub>0</sub>2 There is no statistically significant association between SGLM and acquisition of employability skills among the vulnerable youth and those taught using traditional methods in Nakuru County.
- $H_03$  There is no statistically significant association between SGLM and acquisition of lifelong learning skills among the vulnerable youth and those taught using traditional methods in Nakuru County.

#### 1.5.1 Research Questions

The following research questions were used to achieve objective 1 and 5 in the study

- i) What are the training methods used by community trainers when training the vulnerable youth with skills in Nakuru County?
- ii) What are the challenges encountered by trainers when using SGLM to train the vulnerable youth with skills in Nakuru County?

# 1.6 Significance of the Study

The study provides a flexible, interactive and participatory training method capable of enhancing the three categories of skills necessary for transforming the vulnerable youth to productive lives. SGLM provides an alternative method to non- formal training systems which can be used to harness the capabilities and talents among the vulnerable youth. It enables the trainee acquire broad-based skills in vocational, employability and lifelong learning skills to improve their self-concept. This being a less researched area, the findings of the study could trigger interest in the academic world to bridge up the gaps within skills development and provide all inclusive training programs. This in return would increase youth productivity, making them more resourceful in personal and national development issues. The findings may also benefit stake holders involved in youth rehabilitation especial NGOs and church organizations. The findings of the study may also inform policy makers in youth development at National and County level, as a guide on the best way to engage with the vulnerable youth.

#### 1.7 Scope of the Study

Nakuru County has 10 identified vulnerable youth groups who operate under churches and Non-governmental organizations. These groups comprise of men and women between the ages of 14 and 30 years. The study was conducted on four vulnerable youth groups drawn from four sub counties in Nakuru County namely: Nakuru East, Subukia, Njoro and Molo (see appendix 1). The four groups are identified by the names of sub counties they operated from though they had their group brand names. These youth have been brought together by church organizations and non-governmental organization (NGO) as support groups and are engaged in social and income generating activities with a membership of 15-30 members each. This location was selected due to the existence of coherent and organized vulnerable youth groups involved in different activities and could benefit from skills training. Emphasis was on the use of SGLM methods and its effectiveness to enhance acquisition of selected vocational, employability and lifelong skills among the vulnerable youth in Nakuru County.

#### 1.8 Limitations of the Study

- Lack of prior research and statistical documentation on vulnerable youth in Kenya limits the available literature on the subject especially for Nakuru County. However the researcher purposively used the groups that were organized by churches and NGOs.
- ii. Attrition and absenteeism during training, this was mitigated by having a higher number of trainees than 30 in both the treatment and control groups to ensure that the sample size was maintained.
- iii. The training for control group was conducted by a different person while the treatment group was conducted by the researcher making difficult to control for some internal threats.
- iv. The data collected was categorical in nature, which posed a challenge to test for the difference between traditional and SGLM methods.

# 1.9 Assumptions of the Study

- i. The study assumed that the vulnerable youth selected would be interested in learning craft skills.
- ii. That the vulnerable youth will have the same characteristics though originating from different places

#### **1.9 Operational Definition of Terms**

The following are terms that were used in the study;

- **Acquisition:** Oxford dictionary (2011) defines the term as the process to attain something. In this study it means the transfer of the skills among the trainees through interactive and participative group activities during the training.
- **Craft skills**: Mashantile (2011) defines the term as knowledge of the manipulative/ practical skills to produce handmade items and can be passed on from one person to another. The term is a synonym with handicrafts. The same was adopted for the study.
- **Critical thinking skills:** Sazama and Young (2006) define critical thinking as skills that apply across a variety of jobs and life context. This carries the same meaning in this study.
- **Development:** Is the general transfer of similar skills to very different settings for the purposes of improving the way people feel, think, behave or resist learning (Priest, 2013). The term was taken to mean the same in this study.
- **Education:** Entwistle (1999) refers to an art that focuses on learning new skills, knowledge, and attitudes that will equip an individual to assume a new job or to do a different task at some predetermined future time. The term was taken to mean the same in this study.
- **Effectiveness:** Cambridge Dictionary (2011) defines the term as the ability to successfully produce the intended results. The term carries the same meaning in the study and will be measured by examining the association between SGLM and acquisition of selected skill.
- **Employability Skills:** Randall and Katharine (2011) define the term as transferable skills needed by an individual to make them employable and are acquired through experience and interactions. This study has taken the term to mean skills required for a person to be able to fit in different life situations. The term has been used interchangeably with transferable skills
- **Facilitator:** Refers to the person who spurs or directs a process (Githua & Kiruhi, 2009). In this study it refers to the trainer who conducted the training, in this case it is the researcher and the research assistant conducting the study or the person guiding and controlling the training process.
- **Formal learning:** Fennes and Otten (2008) defines the term as learning typically provided by an education or training institution which is structured (in terms of learning

- objectives, learning time or learning support) and leads to certification. Formal learning is intentional from the learner's perspective. The term was taken to mean the same in this study.
- **Group based learning:** Millis (2010) defines the term as a highly structured form of group work that focuses on problem solving. When directed by effective trainer can lead to deep learning, critical thinking and a genuine paradigm shift in learners thinking. In this study it refers to the model or plan that comprised of seven steps that were used to organize the learning groups and to facilitate the training of the learning groups during the study.
- **Group dynamics:** is the social process through which people interact and behave in a group environment. It involves how individuals influence each other, power and behavior and how this affects the group process (Marcus, 2014).
- **Indigenous:** Ojameruaye (2007) defines the term as skills that are inherently among the community and can be passed on from one person to the other and from one generation to the other. The term was used to refer to waste or recycled materials and art skills used by the groups to produce craft items.
- **Informal learning:** Fennes and Otten (2008) defines the term as any learning resulting from daily life activities related to work, family or leisure and typically does not lead to certification. Informal learning may be intentional but in most cases it is non-intentional or incidental. The term carried the same meaning in this study.
- **Interpersonal skills:** Raymond (2005) describes the term as ability to communicate, interact and relate with other people. This carried the same meaning in the study.
- **Jua Kali:** This is Swahili word mostly used in East Africa. Kings (2005) uses it to refer to small businesses operated in the open air or make sift shades. The term takes the same meaning in this study.
- **Junk Art:** Cambridge dictionary, (2011). (2011) defines the term junk as things that are considered useless or of little value therefore junk art refers to the practice of using would be waste materials to make craft products, this meaning was adopted for this study.
- **Learning:** Entwistle (1999) and Brown (1994), Kevin (2004) defines the term as is the development of abilities that are essential for problem solving and lead to the understanding of interrelationships of concepts and procedures during learning, a position that is embraced by this study

- Lifelong learning: European commission (2014) defines the term as learning new things throughout one's life, particularly after completing initial formal education. While Williams, (2009) explains the term as the concept of continuous development of individuals ability to access and use information to improve on knowledge and skills well past the mandatory secondary education requirements. It incorporates professional development practices conducted by an individual over the duration of their life. This carried the same meaning in the study.
- **Model:** A structural design of a system, a style or a plan of something (Cambridge dictionary, 2011). In this study the term refers to the strategy used in training the vulnerable youth.
- **Non-formal learning:** Fennes and Otten (2008) refer to a form of learning that is not provided by an education or training institution and typically does not lead to certification. It is, however, structured (in terms of learning objectives, learning time or learning support). It is intentional from the learner's perspective. The term took the same meaning in the study.
- **Occupational skills:** UNDP (2011) refer to technical proficiencies in a trade area or generic skills that do not refer to specific trade but used across the board, in terms of ability to select and use tools and materials correctly as well as adhere to safety and health measures relating to specific trades. The term carried the same meaning in the study.
- **Self-employment**: UNDP (2007) defines the term as a personalized initiative to create a job for one self or others for the purpose of earning a livelihood through exchange of goods and services. The term carried the same meaning in this study.
- **Skills:** Kim (2013) refers to practical proficiencies, competencies and abilities which a trainee of a given course has acquired as a result of undergoing training formally, informally or through non formal procedures. In this study it refers to the ability to produce a piece of craft as well as change in attitude and behavior.
- **Soft skills:** These are non-job-specific skills that relate to an individual's ability to operate effectively in the workplace; they relate to issues of creativity and are usually described as perfectly transferable. The five clusters of soft skills identified were: personal effectiveness skills; relationship and service skills; impact and influence skills; achievement skills; and cognitive skills. (European Commission 2013).UNESCO (2012) defines the skills as part of life skills required to enable the youth adapt to different work environment and improve their chances for self-

- development and are acquired through interaction. In this study this refers to skills acquired through interaction with others and the environment as they carryout group based activities.
- **Strategy:** (Cambridge dictionary, 2011) defines the term as a plan or tactic. In this study it is a method or approach through which the training was conducted.
- **Traditional training methods:** Bennet (2001) refers to how a trainer transmits skills, knowledge and attitudes to the learners through expository methods, giving illustrations as the trainees listen passively and take notes. The techniques used are either content centered or trainer centered with the learners as mere recipients. In this study it refers to the training methods that are commonly used by field trainers who train youth groups and was used to train the control group during the study.
- **Training:** Refers to a systematic preparation of individuals to improve their capacity to perform functions valued in the job market and society (Priest, 2013). In this study it refers to the passing on of vocational craft skills and the subsequent acquisition of transferable skills using either SGLM or traditional methods.
- **Training model:** This is the sequence of steps or phases (the arrangement) used to achieve particular types of learning outcomes (Kenny & Mclaren, 2015). This carried the same meaning in the study.
- **Transferable skills:** European commission (2013) refers to those skills acquired from training or experience which can be used in multiple life situations and contexts. The skills are often described in a number of ways such as latent skills, soft skills, employability skills and key competencies. In this study it refers to selected behavioral traits which are part of the employability skills that the vulnerable youth were expected to acquire during the training.
- **Vocational pedagogy:** Is the science, art, and craft of teaching that prepares people for certain kinds of working lives (Lucas, Spencer, & Claxton.2012). This carried the same meaning in the study.
- **Vocational skills:** Kings (2005) defines the term as practical based knowledge that enables one to manipulate materials to come up with a tangible product or services. In this study it refers to occupational skills and craft skills required for one to be able to safely manipulate materials and techniques to make the craft items.
- **Vulnerable youth:** Natumanya, (2014) refers to the youth who do not receive any form of care or support from parents or government and are socially disconnected. In the

study the term referred to the youth who have dropped out of basic education programs or never attended any form of school due to different challenges and are struggling to meet their basic needs.

**Youth:** The transitional stage between childhood to adulthood, in Kenya a youth is between 18 and 35 years (GOK, 2008). In this study it refers to vulnerable youth group members within this age bracket who participated in the study.

**Youth group:** This refers to persons between the ages of 18 to 35 years and has joined together with a common objective (GOK, 2008). In this study the term refers to the vulnerable youth who have joined together with an intention to engage in income generating activities and receive psychosocial support.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter summarizes the reviewed literature related to the study as discussed under the following sub topics: Vulnerable Youth; Youth Empowerment; Youth training and skills development; Vocational skills in Kenya; Skills gap among out of school youth; Classification of vocational, employability and lifelong learning skills; Group based learning method verses traditional methods; Benefits of group based learning; Organization of structured group learning model; Theoretical and conceptual framework.

#### 2.2 Vulnerable Youth

Vulnerable youth refers to the disadvantaged youth who dropped from the school system or never attended at all, and do not receive any form of care or support from parents or government. Their normal progression and transition is complicated by several challenges such as: teenage parenthood, homelessness; drug abuse, delinquency, physical and sexual abuse and illiteracy, learning disabilities and related conditions, which results to failure and disconnection from the society consequently lifelong economic and social hardships (Zweig, 2003). Disconnection from school and skills training programs interfere with their successful transition to adulthood yet these youth can achieve their life goals if given opportunities and support. They become victims of risk factors and are vulnerable to all form of abuse.

Increasingly coming into play is the growing economic, social and political disengagement of these youth. Failure to provide them with opportunities not only shuts down a key economic window to national development, but exposes the society to political and social insecurity as these youth seek for alternative engagements (Adrienne & Alcantara, 2014). As they mature, the youth develop a desire to engage in some form of education and training, the rigid nature of the education system may not accommodate them, but they can benefit from alternative non formal training models and programs as observed by Voluntary Services Oversees (VSO), (2014).

Developed countries have several policies and programs aimed at addressing the plight of vulnerable youth, however many of these programs have not developed into a coherent support systems due to administrative issues and lack of proper mechanism to coordinate the activities. The future of any nation depends on the ability of its young people to make positive contribution to the society. The youth sometime face challenges that prevent

them from contributing to economic, social and political progress of a nation; these challenges also affect their smooth transition to adulthood (Alcantara & Adrienne 2014). Lack of parental care at an early age results to deeper challenges of child delinquency and consequently teenage homelessness, drug abuse, physical, sexual abuse and illiteracy. These challenges lead to failure and disconnection from the society, lifelong economic, social hardships and vulnerability.

According to Wilson (2013) there are several factors that motivate the vulnerable youth to seek education and skills training such as recognition of the role of education and training as a means of securing employment opportunities as well as gaining financial independence. The youth may engage in skills training programs to gain employment, for lifelong learning or skills upgrading. This is a major motivation and reflects the strong association that the youth attach to education and employment. However, the long training duration in most programs inhibits out of school youth participation. Other factors that motivate out of school youth to enroll for skills training include gaining qualification or certification for those who would want to sit for exams offered by different training authorities as a pathway for academic progression. While other would want gain skills to start their own businesses or change their business, boost their confidence as well as upgrade their level of education to improve the quality of their lives. All these factors support the importance of lifelong learning skills to the vulnerable youth. Non-formal training programs are embraced in some developed countries and are referred to as alternative schools, where youth and adults can access skills training.

The price of neglecting young people positive development and training can be substantial as Kurtz (2011) and Morton & Montgomery (2011) put it. This cost may be incurred in resultant crime, support given to corrective education programs like approved schools, rehabilitation centers and loss of state benefits. If this study can make a contribution toward circumventing the long term challenges of vulnerable youth, then the revenue used in correction centers would be channeled for other developments.

Proponents of youth empowerment approaches, observe that young people cannot be adequately prepared without focusing on their psychosocial development that effectively capture their interest (Morton & Montgomery, 2011). As quoted from Kelley (2003) "adolescent boredom, frustration and alienation... drug use, teen pregnancy, and delinquency" indicates "the absence of wellbeing, self-esteem, and other qualities of positive youth development" (p. 47). The author proposes a psychological approach to positive youth

development based on interventions that attend to mind, thought and consciousness. This result in a psychological change inclined to a desire to lead happy productive and non-deviant lives. This argument is part of what has informed this study that a different training approach based on interactions, relationships, learners interest and a social environment would not only help in skills acquisition but change of self-concept among the vulnerable youth.

In Kenya as in most African countries, majority of the rural and semi urban youth do not enjoy the luxury of living under the care and protection of parents or guardians so as to complete education and skills training for a smooth transition to independent adult life. They drop out to become care givers, providers, parents and defenders of society at an age when they should be in school learning. Consequently their future contribution to national economic, political and community life is interfered with (Muthee, 2010). The high number of out of school youth contributes immensely to youth unemployment as this group does not possess useful skills for either self or salaried employment. In as much as the number of vulnerable youth continue to increase threatening security in rural and semi urban setups, very little has done in terms of setting policies and financing programs dealing with this condition mainly due adequate mechanisms to register the vulnerable youth (GoK, 2013).

Many economic and social commentators see education and training as the vehicle through which increased productivity, innovation, and competiveness can be delivered to the youth. The process also fosters social equity, cohesion, patriotism and cultural development in a complex and competitive world (Chappell & Hawke, 2012).

There is an increasing number of vulnerable youth not able to access education as a basic right especially among the poor families suggesting that the incentives of the end-user are not yet optimized. This study recognizes that the vulnerable youth also have their own aspirations and ability to participate in self and national development. Therefore an alternative skills training program with conducive methodologies is vital for an all-inclusive youth empowerment initiative.

#### 2.3 Youth Empowerment

Youth empowerment is the process where young people are encouraged and assisted to take charge of their own lives. Globally there are a variety of initiatives in place by NGOs, government sectors, faith based organizations as well as schools and colleges to support youth empowerment. Muthee (2010) observes that Kenya's population is largely youthful whereby, 75% of the country's population is made up of persons aged 14 to 30 years and

form about 60% of the total labour force in the country, yet majority are unemployed. Empowerment in its varied forms is the solution to numerous issues confronting human beings especially those at grass root level. Its absence results to powerlessness, helplessness, alienation and loss of control over one's life (Mutuku, 2011). Youth empowerment is based on the belief that the youth are the best resource for promoting development and they are agents of change in meeting their own challenges and solving their own problems. The youth are empowered when they acknowledge that they are free to make choices for their life, take action based on their decisions as well as accept responsibility for their actions (Gill, 2009; Kathleen, 2005).

Education and training is one facet of youth empowerment, when well facilitated education and training contributes towards reducing social and economic inequality. The process improves functional and analytical ability among the youth therefore opening up opportunities for individuals and groups to access employment and livelihoods. According to Vijay & Goel, (2014) transformative education and training is an effective tool for widening and increasing democratic participation and improving the overall quality of individual and societal life.

Youth empowerment through training has been among the key government's agenda in terms of policies, programs and initiatives launched to address the challenge. Training and skills development is the process of growing and developing one's capacity in a positive way and can take place in the context of formal, informal and non-formal settings. However the process mostly benefits the urban and elite youth closing out the rural and vulnerable youth, though they have the same obligations. In Kenya a large number of these youths are engaged in undefined activities and earn very little to sustain themselves and their families. According to Kenya National Bureau of Statistics (KNBS), (2010) 72.4% in Kenya are youth of which 28.4% are male and 44% are female, majority are economically unproductive especially among the disadvantaged and vulnerable youth. This rate is high due to lack of work related experience, access to information and specific employability skills that allow them fit in various situations (Ombagi, 2012). The youth policy 2008 priorities globally is to empower them to participate in Nation-building through community development projects, civic activities and inclusion, as well as involvement in creative arts and sports or financial assistance to start small business. Keeping Youth in School and expanding vocational training opportunities is also among the youth policy priorities. The benefits of youth empowered through education and training cannot be under scored as it results to productive livelihoods and crime reduction/ avoidance.

National Youth Policy envisioned promoting equitable distribution of resources and accessibility to socio-economic opportunities for the youth. The policy proposes to improve affordability and accessibility of quality education at all levels of schooling; promote nonformal education, life skills development and vocational training (GoK, 2008). To this end it is important to identify and promote alternative non formal education and training programs which to accommodate the vulnerable youth who dropped out of school at different levels for various reasons.

# 2.4 Barriers to Learning Among the Vulnerable Youth

The term vulnerable has been operationalized to refer to youth who dropped out of the basic education system for one reason or another. Youth with children are more likely to believe that parenthood holds them back from engaging in education, employment or training. UNESCO, (2012) identifies financial cost in terms of fees and upkeep, child security and personal support while learning as some of the major barriers for the vulnerable youth to engage in formal learning programs. Many young people operate under tight financial circumstances and place great value on receiving financial support. Course content and format including the style of learning, relationships with teachers/ trainers, the learning environment, and a lack of enjoyment or interest are other barriers, which may have denied them the opportunities in education.

Young people often find class room style of learning repetitive and uninteresting, resulting in lack of motivation and a negative view of the value of learning. Negative attitude towards self or the course, lack of learning skills or formal qualifications often acts as a barrier to engaging in education and training. The youth face problems associated with crime, homelessness, substance abuse or a lack of confidence which act as barriers to successfully engage in learning (UNICEF, 2011). Many young people who are not in education, employment or training have had poor experiences in education previously which makes them skeptical to engage in learning. This makes it difficult to convince them of relevance and benefit of learning if they are to be encouraged to engage in lifelong learning (United Nations, 2006).

# 2.5 Youth Training and Skills Development

According to World Bank report (2005) youth training and development is an approach as well as a philosophy, which is holistic and positive focusing on development of skills and competences on all youth. The report explains skills as a form of asset that may help in developing and nurturing talents among the young people. Youth development is a process that engages young people in positive pursuits. This helps them acquire and practice skills, attitudes, and behaviors required to become effective in successful adult lives (Adrienne & Alcantara 2014). Youth who acquire competencies across the domains are likely to achieve desirable outcomes, leading to educational, professional social and economic success. Youth training and skills development are vital ingredients to youth empowerment. One of the key challenges facing the Kenyan youth is lack of necessary and relevant training, knowledge and skills required to lead sustainable lives especially among the vulnerable youth (Omolo, 2010). The process of growing up and developing one's capabilities is obvious, but the major challenge is on how to promote positive development among the youth and expose them to experiences that will nurture their talents and creativity (Zurcher, et al. (2014).

UNDP (2012) noted that the youth in Kenya lack in vocational, transferable and lifelong learning skills. Employability skills may include: Communication, Teamwork, Problem-solving, Creativity and innovation, Planning & organization and Self-motivation. While lifelong learning skills may include learning skills, ability to network and information literacy. These skills are like internal assets and may help in nurturing the external and internal qualities of young people, create a sense of self-esteem, purpose and focus as envisaged in World Youth Action Program for to the Year 2000 and beyond (World Bank, 2006).

According to Kenya National Youth Policy (GOK, 2012) the youth have responsibilities and obligations which include: Patriotism, participation in social and economic development, promote peace and peaceful coexistence, create gainful employment, participate in lifelong learning, develop positive attitude towards work, and take responsible charge of their lives. For them to be able to fulfill these responsibilities and obligations, supportive training program that is holistic is necessary. It calls for a purposively designed training program with explicit aims and learning objectives geared towards developing and harnessing their capabilities and talents. A training approach that would help to change their attitude toward life and situations may be embraced. Silver Spring report (2011) notes that there is a growing youth population yet the economic growth rate have not been sufficient to

create employment to match the increasing labour force and therefore there is need to support those who are already in self- employment as well as those willing to join.

Wanjumbi, (2006), notes that youth unemployment crisis require a change from dependency on formal training programs to an environment that enables the youth pursue self-help initiatives for self-employment. Kenya government through the Ministry of Youth Affairs recommends that youth programs identify, support and partner with efforts from community based organizations and NGOs to promote and encourage skills development through vocational training and life skills, an initiative that this study aims to support. Several programs such as business skills training and accessible loans have been put in place to support youth development. To benefit from the services and resources offered by the government and NGOS, youth in Kenya have been encouraged to form self-help groups. This will assist them to attract financial and psychosocial support and engage in income generating activities for sustainable livelihood (GOK, 2009). This makes them accessible for any form of support, though the vulnerable youth may not have accessed the necessary information on what is expected of them.

Kamau and Mwangi (2010) observe that investing in youth training and skills development is investing in National social security and economic development. Skills development through Vocational and Entrepreneurship programs will enable the country address unemployment problem among all the youth. According to UNDP (2011), not all the youth have the opportunity to join formal skills training programs due to poverty, lack of required entry qualification or family responsibilities that they cannot negate. United Nations report (UN, 2004) observes that lack of clear evidence on economic and social returns from vocational skills training programs threatens the sustainability of institutionalized form of training and therefore non formal approach to skills training should be encouraged to allow the trainees choose the content and the training process for effectiveness and sustainability. Dahlman, Zeng, and Wangs (2007) observes that skills training can no longer be done only through institutions using traditional methods of teaching but also through work group approach as it provides for expanding the content and creates a flexible learning environment. This perception is also supported by Nyerere (2009) who observes that the changing trends in job market and production systems require change in the training approach as well.

United Nations Educational Scientific and Cultural Organization (UNESCO), (2004) and International Labour Organization (ILO), (2001) explain that the international goals of education and training is to prepare young people for life by developing their intellect,

aptitudes, talents and create opportunities for them to reach their full potential. This will improve their chance to earn a living and participate in the democratic process. According to UNESCO (2012) the youth in Kenya have great potential in creativity and innovation which can be exploited in the untapped economic opportunities and create employment in the respective counties, including arid/ semi-arid, slum and rural areas. With the right combination of skills, motivation, ideas and opportunities, young people would be able to establish productive and creative business ventures and shift themselves from job seekers to job creators and reduce their level of vulnerability.

In many developing countries the youth generation is the largest engine for growth if provided with opportunities in skills training at all levels (UNESCO, 2004). Kenya's vision 2030 is anchored on economic, social and political pillars to propel the country's economic growth. For this to happen, the youth are to provide the bedrock for the transformation of necessary human resource skills for technological and industrial growth in both rural and urban set ups (GOK, 2008). The vulnerable youth may not be able to contribute to the realization of this vision as they are not empowered. Kenya needs an all-inclusive youth training program to support productivity in the small, medium and micro, enterprises that account for 76% of youth engagements especially in the rural and semi urban areas (UNDP, 2011).

According to Wilson (2013), most of the vulnerable youth are found in semi urban, slums and rural areas and may have dropped out of school or have low education due to poverty. The youth wherever they live or whatever their background, require skills that prepare them for involvement in sustainable livelihoods. Skills development is vital in reducing unemployment, poverty and promoting growth. The republic of Korea moved from being a developing country to a developed economy in just 30 years by emphasizing and planning for relevant skills development among their youth (Wang & Shuilin, 2007). Advocates of human capital theory argue that just as investment in plant and equipment has productivity gains, likewise investment in the youth through skills training increases earnings, improve products and services and livelihood.

World Bank (2007) notes that involving the youth in planning, implementation, and evaluation of programs that affect their lives reinforces a sense of belonging and ownership, resulting in sustainability and success of such programs. Youth unemployment is one of the most critical social -economic problems that less developed countries face today. Yet little is known on how best to transition the youth from school to work or boost production

capabilities for those not in the education and training systems (Majumdar & Shayamal 2009). In view of this, every youth require a form of training that will integrate them into the community and improve their quality of life hence the need for a more effective and flexible all inclusive training programs that would cater for the vulnerable youth.

# 2.6 Skills Gap Among the Youth

Skills gaps identified as prevalent among the youth in developing countries have been put in three categories as shown on Table 1.

Table 1: Categories of Skills

Vocational skills		<b>Employability Skills</b>	Lifelong Learning
			Skills
Occupational	Craft Skills	Interpersonal Skills	
-Ability to	<ul> <li>Understanding</li> </ul>	• Communication	• Information
prepare the work	sketches	& listening skills	literacy
station	• Interpreting verbal	• Team work	• Learning skills
-Using equipment	descriptions	<b>Problem Solving</b>	<ul> <li>Networking and</li> </ul>
and tools safely	<ul> <li>Developing motifs</li> </ul>	<ul> <li>Creativity and</li> </ul>	• Partnership.
and effectively	and specifications	innovation	• Use of
-Managing and	<ul> <li>Branding and</li> </ul>	<ul> <li>Planning and</li> </ul>	technology
reuse of waste	packaging the	organization	
materials	products	• Self-motivation	
-Identifying and			
mitigating risks			

Source: UNDP (2012): Skills gap analysis for out of school youth

The skills gaps that need to be filled among the youth for them to be able to participate positively in national and personal development are as shown in Table 1. The gaps are categorized into three; vocational skills, employability skills and lifelong learning skills. These skills have been broken into specific attributes which express competency in each category. These skills are very crucial to as they equip the trainees with capabilities to fit in different situations. It is therefore important to use an effective training method to ensure acquisition of the skills among the youth

### 2.6.1 Vocational Skills in Kenya

Vocational training concerns itself with the acquisition of knowledge and skills required for the world of work either through formal, informal and non-formal approaches. These skills can be classified as; technological, industrial, handicrafts and occupational safety and health skills. The education and social background of the vulnerable youth may not allow for advanced vocational skills, therefore handicrafts and occupational safety and health skills have been selected. Vocational skills training have been identified as an important tool for self-development and employment creation for the youth. Vocational skills provide the youth with specific knowledge which can be translated into products. However, majority of the youth are unable to translate this training into productive and sustainable livelihood for several reasons such as lack of self-initiative, creativity and low motivation (UNICEF, 2011). Vocational training has not only become a basic human right, but enables workers realize their full potential besides being a prerequisite for Industrial, technological progress and regional development. In Kenya, youth training in vocational skills is mainly offered formally in Youth Polytechnics, Technical Vocational Education and Training (TVET) institutions, Technical Universities and by the 'Jua Kali' sector inform of apprenticeship programs (Wanjumbi, 2011). However, there is a category of youth who are not enrolled in any of these programs as they either dropped out of school or could not progress after completing one level, yet they have the same obligations as envisaged in the youth policy and would need to be equipped with skills to participate fully in national building. Hence the need for skills training program to accommodate the vulnerable youth as well.

International Labour Organization (ILO), (2012) observe that vocational skills training in developing countries attract the economically underprivileged, the physically challenged and the rural community. This makes it an equity measure with a rural bias as it allows the less fortunate in the society to acquire skills and contribute positively to national development. Similar sentiment are shared by Kings (2005) who noted that formal, informal or non-formal vocational skills training programs act as a source of training to majority of the poor youth. Therefore diversifying the skills and improving the approaches to the training process would provide a flexible and accessible program for all and impact positively on the development of vulnerable youth. UNDP (2011) noted that vocational skills may provide a pathway for young people's transition from idleness and dysfunctional behavior to productive ventures. Vocational programs are also expected to impact on interpersonal and problem solving skills to the youth, which are achieved through training programs that simulate real

work environments as well as using training methods that enhance learning, address learners' diversity and their interest.

Nyerere (2009); Kinyanjui, (2007) and Siririka (2006) observe that very few vocational training graduates engage in self-employment or in activities related to their skills training. The authors associated this to the fact that most of the skills taught are technology and industrial based and require capital intensive equipment which is unaffordable to the youth. Furthermore majorities do not have the confidence to go into self-employment therefore together with practical skills, equipping them effectively with employability/ transferable and lifelong learning skills would improve their self-confidence and hence their chance to engage in sustainable livelihood thus reduce prolonged dependency and vulnerability. Youth development and training provides opportunities to support the youth develop a sense of usefulness, belonging and empowerment attributes that improves their productivity (Odhiambo, 2006).

UNEVOC report (2009) acknowledges that for the youth to participate and contribute fully to self and national development they require not only entrepreneurship and business skills but also vocational and employability skills. The report further notes that vocational training plays a part in developing mental readiness among the trainees; which means that the skills training would stimulate an interest to productivity and give them the confidence required to engage in self-employment. Corcoran and Osano, (2010) noted that very few youth possess the knowledge and skills that could be utilized for production of goods and services hence their vulnerability to engage in anti-social behavior and join criminal gangs. Acquisition of some facets of employability skills help to build confidence and increase the sense of self-worth in an individual. It is difficult for entrepreneurial action to take place if the youth lack the self- motivation and confidence. For this to happen, a more transformative method of training to assist them build up their confidence level as they play various roles during training need to be adopted.

Mondugwa (2012) observes that vocational skills training is coming out of the 'tool box' ideology and has numerous social economic benefits, therefore methods of training should also change to exploit the benefits. The training approach should raise the trainee's aptitude and achieve self-development. Vocational training has proved instrumental in enhancing social cohesion, integration and environmental conservation. The program has tremendous benefit such that it requires a training approach which is more than transfer of information from the trainer to the learner. Socio-economic challenges facing the world

globally have emphasized the need for availability of skills and learning opportunities for all categories of young people (International Labour Organization (ILO, 2012). According to United Nations report (2004), human resource development is the main engine for growth, therefore investing in youth training will impact on jobs, income equity and poverty alleviation. The report further emphasizes that the quality of any training program cannot exceed the trainers approach, hence the need to improve the training strategies for satisfactory training outcomes. Any effective skills training methods should prepare the trainees to adjust to the social and economic needs and fit within the environment they operate in. Faraday, Overton, and Cooper (2011) observes that the teaching learning process in vocational skills is too general and needed an approach that would emphasize on harnessing individual learner's creativity and interest.

Vocational pedagogy may be narrow but the setting and context may be engaging but the methods used can be too passive and uninspiring to the learners. However work and technological challenges requires emphasis on vocational outcomes that are not only focused on acquisition of technical skills and competencies but also skills that seek to change and address the way people engage with work, hence the attention on the training methods. Increased emphasis has been moved from specific vocational skills to generic skills which are also referred to as occupational skills, which are crucial for work related environments as one engages with tools and equipment especially in production (Chappell & Hawke, 2012).

# 2.6.2 Occupational Skills

Occupational skills refer to generic technical proficiencies in a trade area and are not job specific. Competencies associated include; ability to select and manage tools and equipment as well as identifying and handling raw materials safely. The ability to work safely and handle the relevant tools appropriately is also included as it is important in minimizing risk and promoting health and safety measures at the work place (UNDP, 2012). These are important qualities to a worker as they enhance production and ensure a safe and healthy working environment. Since the groups' activities involves handling tools and equipment, then these skills are essential. Occupational skills may also provide the trainee with ability to identify and mitigate risks in all aspects of live and business environment, an attribute that would be very useful to vulnerable youth (Lourens, Bulela, Eunices & Mampuru, 2014). This does not only involve proper handling of tools of production, but also identifying possible risks in workplace as well as developing means of mitigating those risks. Adequate knowledge in occupational skills help to apply technology and the appropriate physical

capacity contributing to the effective carrying out of tasks thus increasing production and quality of craft products (Science & technology committee, 2017; Kim, 2013).

### 2.6.3 Craft Skills

This is part of vocational skills and refers to the knowledge of manipulative/ practical skills to produce certain handmade items and can be passed on from one person to another also referred to as handicrafts (Mashantile, 2011). Kenya Federation for Alternative Trade (KEFAT), (2011) describes the term as referring to the family of artistic practices within the creative arts discipline, traditionally defined by their relationship to functional or utilitarian products. Crafts are a type of work where functional and decorative products are made completely by hand or using only simple or rudimental tools. The skills comprises of ability to interpret verbal descriptions into sketches, developing motifs and specifications to maintain consistency during production as well as branding of the craft items and packaging. According to Reeves (2011) handicrafts are part of the wider vocational skills whose objective is to provide and promote skills training for self- employment and lifelong learning, examples of these skills include garment making, carpentry, welding, pottery, paper, feather, flower crafts and recycling materials (junk art) and performance arts. Handiraft skills were traditionally embraced by most communities as social activities not necessarily for income earning; the skills were mostly practiced by women and children. In the past, training in craft skills was part of community socialization where men and women craft masters trained the youth informally (Mashatile, 2011). Today craft skills may be learnt through institutionalized training or transferred informally from one person to another or through group activities. Most people use them as a pass time activity and not for any economic gain which undermines the desire to perfect the skills and produce high quality products competitive in the global market (Suzuki, 2011). The available form of training for these skills is through non formal community based activities or apprenticeship; this makes them more appropriate for the vulnerable youth groups who are already involved in other income generating activities.

Handicrafts skills are part of vocational skills have not been formally established as an academic discipline but are socially passed on from one person to another through observation and imitation. According to Gwamoiza, Haidara and Schniepper (2013), vocational craft skills training process can play an important role in developing a generation of youth who will face the global challenges posed by socio-economic development. Apart

from preparing youth with production skills, crafts are also instrumental in social cohesion and integration, hence the need to use training methods that are facilitative and interactive to enable the vulnerable benefit fully with all the associated benefits.

Crafts production as in most creative arts activities, utilizes indigenous skills and materials within the environment. Handirafts are categorized based on the raw materials used to make them which may include: recycled and natural materials, paper, animal skin, fur, feathers, textiles, and plant fibers. In Kenya there is a wide variety of artificial and natural raw materials which can be used to produce beautiful crafts such as; semi-precious stones, bones, banana fibers, shells, feathers, seeds, leather, textiles, hooves, horns, leaves and sisal (KEFAT, 2011). Most crafts have their roots in traditional cultures, while others were initially practiced in specific geographical locations but have been popularized through modern interventions. They are used for developing the general skills, creativity and critical thinking of learners and sometimes towards a particular occupation or trade. Developing craft skills require patience and consistency that can be learnt by virtually anyone (Christine, 2013). In some of the developed countries, students learn how to work with materials such as metal, textile and wood, not for professional training purposes but to develop their creativity, social skills, problem-solving, use of tools as well as understanding of materials in their environment for economic and cultural purposes (Reeves, 2011). This study has chosen to train the vulnerable youth in craft skills due to the proven social and economic benefits associated to the skills which may play a role in integrating the vulnerable youth into the society.

### 2.6.4. Socio Economic Benefits of Craft Skills

Since the main objective of the vulnerable youth groups is to improve the lives of the members, it is important to discuss the socio and economic factors from crafts. According to Mashantile, (2011) the practice of making crafts has social and economic benefits among the practicing communities or individuals. It is also an activity that instills a sense of belonging and cohesiveness among communities and practicing groups as they develop the products. Many of the youth in rural and semi urban areas depend on unsustainable sources of income such as temporary construction work or hawking (UNDP, 2007). They form groups with the common objective to work as a team and generate group income or as a way of seeking recognition and to empower the members. The introduction of craft skills is therefore an alternative option for the group activities. Most of the handicraft products are made from natural materials and display a significant touch of cultural value or national heritage. Crafts

form part of a people's material culture and therefore important for social inclusion and identity.

Department of Trade and Industry (2005) in South Africa observe that craft sector is a major contributor to national revenue and employs approximately 38,062 people through micro-and small enterprises operating across the value chain. Nyawo & Mubangizi (2015) notes that art and craft sector is vital in addressing the social economic challenges among the rural and urban disadvantaged communities in South Africa and forms part of tourist attraction. The art and craft sector is one of the Small, Medium & Micro Enterprises (SMME) linked to the tour and travel industry promoting local and international trade. The sector also forms part of employment creation in the rural and urban setups.

In India craft production provides 14 million jobs and also contributes to nation building and moral regeneration through the expression of creativity and exploration of culture and heritage. Craft products carry with them the values, views, ideas and interests of the country of origin. There is a huge demand and potential for the developing world to generate products for local and global markets and this is supported by the growing cultural diversity globally. Developing countries supply 80% of the world's crafts in form of raw materials or finished products. Majority of the employees and producers in craft industries are from the socially and economically disadvantaged groups, an opportunity that the vulnerable youth can take advantage of upon acquiring the skills (Roy & Liebl, 2004).

Craft industries have become increasingly important in national economies and global trade and are primary export-earners for some of the leading developed economies like China (Barra, 2012). According to Reeves and Michelle (2011), United Kingdom (UK) crafts and creative arts bring a number of other important benefits including; enhancing social cohesion as members work together, reinforcing cultural values as they produce cultural related products as well as reducing dysfunctional behaviors. The youth are also able to get alternative engagement and promote their interest to protect the local environment as a source of raw materials. Craft skills also contribute towards developing self-confidence as the youth discuss and perform tasks together, exploring identities, supporting employment creation and exploring visions for the future.

Jermyn (2010), points out that craft skills have a potential to engage peoples' creativity, stimulate dialogue between individuals and social groups and encourage questioning, provoking thoughts and imagination as well as self-expression through craft production process. Therefore the skills should be seen as a means to invoke vital

transformation for the youth. Craft skills contribute towards increased employment levels and have the ability to build self-confidence, self-esteem, enjoyment, and crime reduction giving the youth prospects and future outlook. Other benefits may include: increased social contact, increased understanding and tolerance of other people and group identity. Through the learning process teamwork, interpersonal skills, and community involvement and local democracy are realized.

Aitchison and Alidou (2009) refer to craft skills as non-formal vocational training related to livelihoods and poverty alleviation, meaning that craft skills provide a support system for families though statistics on crafts outcome are poorly documented and many of the successful projects are on small-scale. Quality craft products provide the pleasure, pride and patience involved in doing a 'good job'. The skills encourage a working culture where excellence and critical reflection is highly valued. Craft skills contribute towards raising the learners' self-esteem as quoted "by recognizing that self-esteem grows from 'accomplishments not compliments' and can be cultivated through 'powerful projects' which fully engage learners and encourage them to make mutual critique" (Lucas, 2014).

According to Schwarz and Yair (2010), craft makers have a significant contribution to growth and innovation in the wider cultural sector. The authors' further note that the art and craft industry has the ability to promote government priorities such as rural urban economic development, youth and women development and poverty alleviation initiatives. Craft skills also enhance entrepreneurial characteristics such as creativity, innovation, risk-taking and ability to identify opportunities.

Upon realizing the potential of craft skills in economic development the Malaysian government plays an important role to promote traditional skills and craftsmanship as well as assisting the producers in technology based production practices and promote the marketing of craft products (Halim et al., 2011). However craft skills and related businesses are threatened by competition through cheap imitations from East Asia, limited financial resources and marketing knowledge and use of obsolete technology, hence the need of a well thought of training program.

Barbier (2010) report on Ireland craft industry points out that crafts contribute toward employment by absorbing 17,994 persons who are engaged directly or indirectly in industries such as; pottery and ceramics, jewelry, graphic crafts, textiles and stone. The report further indicates that there are about 1,787 youth studying craft courses at different levels; this makes it an important skill base sector for training and youth engagement.

Kola et al. (2009) note that businesses emanating from craft skills have contributed to jobs creation and promoting trade in Nigeria. However many African countries have not been able to harness their craft skills capacities for youth development purposes, due to a combination of external and internal constraints. Apart from the social economic benefits aforementioned, craft skills enhances acquisition of transferable skills to the youth as quoted from Blair and Elizabeth (2012) report that "in America craft skills are taught in vocational—technical schools not for certification but to develop teens' transferable skills, such as problem-solving ability, tool use, and understanding of the surrounding materials for economic, cultural and environmental purposes" pg. 54.

Craft skills also contribute towards social inclusion, Government of Ireland in NESF Report (2007) defines social inclusion as "the process through which certain groups are brought from the margins of society to participate more fully in the society through the removal of social and economic barriers as in cultural identity and contribution. Social cohesion helps social systems hold together as opposed to falling apart. Production of crafts contributes to social cohesion as the group members come together and meet regularly to collect and use locally available materials within the society to make craft products. Prolonged periods of meeting for such activities lead to social bonds, trust and expectations of mutual benefits, which in return results to a sense of community and social identity among the participants. Producing and selling the products results to social cohesion and social capital. Craft skills lead to the development of team skills and positive social behavior as participation in creative arts and related activities can lead to the growth of self-confidence and increased self- efficacy.

Kurtz (2011) in a research report on the political violence experienced in Kenya in 2007 indicates that when youth are socially integrated, then they are less susceptible to involvement in violent groups. Youth with social inclusion skills value their colleagues to a level of not harming them and this enhances social identity and cohesion reducing their chances of participating in violent activities. This creates a patriotic feeling and allegiance to the country and its people making them less likely to engage in or approve of political violence. This attribute is very crucial to vulnerable youth who are associated with violent behavior and held suspiciously in the society.

Making craft products provide an effective way of developing personal skills crucial for behavioral change. The production process requires self-discipline and planning, which in return builds perceived self-efficacy. The final craft products result to captivation and

pleasure from the immediate and direct effects of aesthetic experiences. This experience provides new ways of seeing and experiencing the world, which impact on the individual's sensibility and understanding abilities (McCarthy et al., 2006). The intrinsic benefit may spill over to developing empathetic and sound judgment. The modern society requires youth who can think and make independent decisions and are reasonable and considerate of other people's views.

From ancient times crafts making as an indigenous skill is believed to have enormous benefits. However art and craft sector is under researched in Africa and little has been documented in terms of its contribution to social and economic development especially in Kenya (Rotich, 2012). Documented reports affirm that many of the rural and urban poor depend directly or indirectly on the diversity of natural resources for their livelihoods and income needs. Hay (2008) observes that crafts businesses require little or no capital input as startup and hence it offers a critical entry point into self-employment for the disadvantaged/vulnerable in the society especially the youth. The industry depends on skills passed from person to person by peers or older generations who are mostly women. Major characteristic of craft businesses is that they are dominated by women and the youth; majorities have low skill levels and or no formal education. They use natural resources to make the products with little or no support from the relevant stake holders.

Based on this premise this study used structured group learning model to train the vulnerable youth on crafts skills with an intent to use the process to enhance their transferable and lifelong learning skills and any other latent skill that is associated with the process and reap the afore mentioned benefits.

# 2.6.5 Employability Skills

Employability skills (ES) are also transferable (TS) skills are competencies that are not subject specific and can be applied in diverse situations (Misug, 2014). Employability skills are sometimes referred to as social or latent skills. Snell, Gekara and Gatt (2016) consider the skills as comprising of 'soft' skills such as communication, team work, problem-solving, self-initiative, self-management and enterprise leadership. These skills are non-job specific and highly transferable and help in supporting technical, industrial and vocational skills and are applicable in different life context.

According to Lucas (2014), vocational training programs have the capacity for supporting the development of employability skills through transferable interactions. Many

individuals in formal and informal jobs normally emphasize on vocational/technical skills but do not consider the application of employability skills as part of the competencies required. Understanding employability skills may help the youth transition from one situation to another as well as cope with different work environments (European Commission Report on TVET, 2013). In most cases these skills are embedded in formal training programs which make them like any other academic subject and inaccessible to those not in the school system. This study isolates the following attributes as the most crucial in employability skills: communication, teamwork, problem-solving, planning and organizing, creativity, innovation and adaptability.

Employability skills assist the trainees with the capacity to learn and adapt quickly to different life settings. Individuals with these skills have positive attitudes towards life and are able to identify opportunities or other alternatives. They are adaptive and flexible to different situations without requiring significant upgrading of skills. Employability skills are obscure and difficult to quantify and develop formally, they relate to issues of creativity, self-initiative and self-control. They are closely connected to personal attributes and characteristics (European Commission report on TVET, 2013).

Many countries of the world have reinvented their youth training programs to include employability skills (ES). Korea is among the countries that have recognized the contribution of ES in youth training and development and as a result, changed her vocational skills training program from job specific to a more broad based approach which include employability skills as a way to address changes in the society and in the world of work (Misug, 2014). It is a common problem that most trainers and trainees tend to focus more on the specific vocational skills at the expense of employability skills and creating a learning environment that recognizes and develops the skills in the trainee.

China, whose vocational skills form the pillar of her industrial development, realized that employability skills are a critical factor in the holistic development of the trainees and embraced a training policy to help inculcate the skills; this has enabled her to grow the innovative and creativity of their youth (Matthias, 2013).

The main focus is on vocational trainers applying instructional methods that cultivate personal initiative, confidence and creativity in their trainees. Given the difficulties involved in teaching employability skills, this can be fostered through the use of a highly interactive method when facilitating learning. Such methods may include; simulating a work environment or similar situations during training.

One of the major problems with most training systems is inability to recognize and develop skills for application to varied situations. Every person possesses some degree of employability skills but their awareness and understanding of the skills varies considerably, limiting their ability to apply the skills to different situation (Kim, 2013; Weeden, 2011). Employability skills are inculcated through specific training methods and the way the trainee interact with the learning environment. A trainee who receives training on specific vocational skills using traditional methods is unlikely to develop other skills that are applicable in different life situations (National Quality Council, 2010).

Kenya like any other growing economy is undergoing social, economic and technological transformation. These changes affect the lives of people at all levels, and hence mechanism should be put in place to support the public especially the youth adapt to these changes (UNICEF, 2011). Employability skills are becoming more important to a worker than the specific vocational skills. Snell, Gekara and Gatt (2016) argue that since the importance of transferable skills for occupational mobility and employability is commonly noted by educators, careers counselors and labour market analysts, the concern should then be on how best to inculcate the skills into the trainees. It is generally acknowledged that an individual's level of skills affects their level of personal development, productivity and adaptability to different circumstances (National Quality Council, 2010). Employability skills can be manifested in different forms such as ability to manage resources (allocate time, money, materials, space, and staff), working with others, understanding systems and utilizing technology to name but a few.

These skills are important for one to fit in different environments and maximize human performance (Sarosa, 2011). Employability skills enable individuals to have a broad based view to life, set their personal goals and maximize their productivity. UNESCO (2012) identifies ES as among the most vital skills that young people need. Practically every skilled occupation requires more than fundamental knowledge. The ability to communicate and relate with others is beneficial for one to perform well in business or at the work place. This observation is also supported by Randall and Katharine (2011). ES are very important in all aspects of life including business and can be displayed by how people relate with others and respond to different situations. The skills involve interacting with other people directly and enable individuals to effectively improve relationships, functionality and efficiently use their other skills profitably (Raymond & Romanczyk, 2008).

Employability skills can be best attained in a social set up as in the case of group based learning where members perform tasks together to meet their group objectives. Hassan, Zamberi and Khalil (2012) note that modern work place requires training not only on trade skills but also in skills like negotiation, communication, and team work. However Strijbos, (2008) points out that these skills are difficult to internalize through traditional training methods, but trainees should be provided with an opportunity to practice interactive learning in an environment that simulates their work places or social set up. The same sentiments were expressed by Jin (2014) who pointed out that most of the traditional teaching learning process is concept based and it is difficult to inculcate the ES skills through this process and therefore poses a question as to "whether ES can be acquired through actual experiences or appropriate learning in specific fields of knowledge".

Cecile and Mariadara (2011) note that most of the unemployed youth suffer low selfesteem, and may lack the self-confidence required to engage in self-employment. Acquisition of ES would therefore help them be more creative and innovative and build their confidence in decision making to take advantage of available opportunities. These skills enable a person to maintain a friendly environment with co-workers at the work place and perform their tasks well. The skills are exhibited through the following attributes; emotional intelligence, team work, empathy, integrity and social boldness. The skills may also promote good work practices, customer relations and build confidence in the individual. The presence of these behavioural traits may result to good communication and improved self-concept. Inadequacy of the skills is highly associated with institutionalized learning and trainer centred training methods as observed by Odo, Adenle and Okwori (2012). While vocational skills could be taught in a classroom setting, ES are best internalized when trainees are exposed to different activities in a work environment leading to acquisition of the skills as they interact (Grugulis, 2008). Lack of these skills may interfere with self-concept and hence affect the ability to work independently, communicate with customers as well as the way one present themselves. These attributes affect the performance of the individual negatively and hence limit their chances to initiate individual growth and productive lives.

Individuals rated high in ES are more confident, captivating and interact well with others. They have the ability to control emotions, listen and accommodate other peoples' views thus increasing productivity in an organization. Raymond (2008) and Raiskums (2005) found out that problem solving and analysing requires higher order thinking skills as applied in observation, interpretation, monitoring and evaluation. It also requires ability to identify

problems and find workable solutions. These are high level attributes whose acquisition may be enhanced by the person's level of academic qualification and life experiences.

According to Attanasio, Kugler and Meghir (2011) the youth need to be better prepared for decision making and leadership roles to cope with the challenges of globalization and new technologies. Enhancing ES among the vulnerable youth groups may increase group cohesion, team building and good customer relations, which may increase their ability to produce and market their products and services for sustainable livelihood.

While recognizing the important role played by institutionalized education and training programs, vulnerable youth require a deliberate, open and flexible training program to enhance their employability skills and assist them deal with personal development and the challenges in their lives. Detailed clarification of facets of the selected employability skills has been explained on appendix 8.

# 2.6.6 Lifelong Learning Skills

Debra and Calvin (2009) refer to Lifelong Learning skills (LLLs) as a desire to continue learning throughout one's life. It is a deliberate, systematic and sustained effort to transmit, acquire knowledge, attitudes, values and skills as well as any other outcome of that effort that shapes the development of a person across the life-span. Lifelong learning is a purposeful learning activity undertaken on an on-going basis with the aim of improving knowledge, skills and competency. Lifelong learning incorporates professional development practices conducted by an individual over the duration of their life.

The concept perceives learning as a journey not as an event which ends with assessment and certification. This form of learning is related to professional development and skills learning. Briston University (2011) observes that lifelong learning has several dimensions which include: changing and learning which occurs to the learner as a result of interacting with the content; critical curiosity which is the desire to learn new things and ability to derive meaning from the concept and apply it. These dimensions enhance creativity which refers to imagination and intuition and contributes to networking, learning from others as well as the ability to persevere and persist through the learning process. The report further observes that lifelong learning if deployed effectively results to emancipation and empowerment of individuals, organizations and communities involved. Stella (2012) outlines the main benefits of lifelong learning as; skills upgrading, extension of one's knowledge in the area of interest, social networking with people of similar interests, development of self-

confidence, involvement in community projects, exposure to business ideas and support network.

Corcoran and Osano (2010) observes that some of the barriers to lifelong learning among the vulnerable youth are lack information regarding options, lack of time and money to access the internet facilities, attitudes, perceptions and expectations from the learning experience. The barriers are further intensified by the fact that most of the vulnerable youth lack confidence in their own learning abilities due to poor social and academic background as well as lack of supporting technology.

Williams (2009) perceives lifelong learning as a key requirement for all, especially those who are key stakeholders in the educational development of the next generation. Furthermore, learning for all humans is "wholly a natural impulse" of the living organism and that adults are capable of independent learning without force and persuasion to learn. Learning comes naturally, especially when a participant is provided with the appropriate stimulus. Most of the out of school learning is need driven and participants engage to try and answer specific questions in their lives or to acquire further skills and knowledge to support them in their daily lifes..

Knowles (1984) noted that adults undertake any form of learning due to pressure from a current life situation. An adult will be willing to learn a new process in order to solve a prevailing problem that faces them. The vulnerable youth in Nakuru County are expected to engage in personal and national development just like their advantaged counterparts. Based on this proposition it is therefore important to equip them with skills that would help them identify and use a range of information and technology that contributes positively to their own lives and workplace as they have no opportunity to go back to school. The skills would also help them open to new ideas and techniques and invest time and effort in learning new skills to overcome life and business challenges.

It is no longer possible to assume that the initial education and training the youth acquire in vocational centers provides them with required learning for a life time in the current competitive world. Technological advances, rapid and continuous changes at the workplace have provided an arena where learning throughout the entire life span is essential to keep pace with ever increasing changes in the global village (Williams, 2009). Therefore enhancing lifelong learning skills will trigger passion and curiosity within the youth, an attribute that will impact positively towards the individual and their engagements. Kim (2013) reports that an individual should be responsible for his skills development and

upgrading, though employers benefit from workers' education and training in terms of productivity. Technological changes and the short term nature of technical and vocational skills make lifelong learning an important attribute to the vocational skills practitioner.

Lifelong long skills are neither vocational nor social skills. However it would be difficult for the youth to succeed without ability to access information, networking or partnership that continuously updates their knowledge and skills related to business engagements in everyday life. Kings (2005) acknowledges that lack of lifelong learning and information literacy is not only among the youth but also among majority of vocational skills practitioners especially in the informal sector. This deficiency greatly affects their ability to develop their creativity and innovation. Traditional training methods where the teacher is the only source of knowledge are ill prepared to equip the youth to live and contribute in knowledge based economy.

Dalma, Zeng and Wangs (2007) explains that LLLs is not merely a mechanism for adapting the individual to technological and socio-economic changes, but a vehicle for transforming society and enabling a person to direct and control the course of change in their lives instead of reacting to it. Resources for lifelong learning include; formal education system, non- formal training, the family, places of worship, work place, print and electronic media, library and other settings which seek to support and promote information and learning engagement. According to Stella (2012) without lifelong learning, those not in schools would become isolated or marginalized from participating in global activities. Incapacity to maximize the use of technology and information available from several sources would also expose them to all forms of exploitation. Lifelong learning skills could offer the vulnerable youth an opportunity to update their knowledge on activities or engagements they had previously thought were outside their scope.

This study has selected four central elements of lifelong learning relevant to the youth groups as; information literacy, learning skills, networking and partnership and use of technology. Acquisition of these skills would help them achieve economic progress, personal development, and fulfillment as well as an understanding of democratic policies which are necessary for their participation and social inclusion (Marjan & Ashkan, 2012). With lifelong learning skills the youth can continuously update their skills and also identify new designs and markets for their products through networking and partnership for improve livelihoods.

World systems for education and training are undergoing reforms to improve their relevance, effectiveness, efficiency and sustainability amidst global challenges. While this is

happening, formal and informal training systems in most developing countries continue to provide training programs which do not prepare the learner for out of class learning thus affecting their response to technological and entrepreneurial developments (Fennes & Otten 2008). However it is important to note that all these changes and opportunities are not available to vulnerable youth yet they are equally expected to contribute positively towards personal, social and national obligations.

In view of the afore discussion, it is important that the skills are inculcated through intentionally designed training programs as they learn the specific vocational concepts. Training methods like GBL have been used in non-formal training programs with proven success in enhancing acquisition of social skills.

# 2.7 Group Based Learning (GBL) Model Verses Traditional Methods

Lucas, Spencer, and Claxton (2012) observe that instructional models can be classified into three. The first is direct instructional models also referred to as transmissive teaching where content is delivered as it is using some form of methods such as lecture or demonstration. It is a form of learning where information from the content is transferred from the trainer to the trainee. These methods limit the learners' involvement to listening and taking notes. The second is indirect instruction models also referred to as transactive teaching where the teacher does not teach the content directly but develops strategies to assist learners make meaning from the learning experience. The third is interactive instruction models also referred to as transformative methods where the teacher combines the direct and indirect approach to facilitate learners' participation through interactive approaches which transform their lives and the world around them. Group based learning is among the many techniques associated with transformative and participatory learning.

and Cheong Christopher (2010) define GBL structured as highly a interactive/participative approach which borrows from other methods such as transactive teaching and transmissive teaching and content focused. The method does not emphasis on the trainer or the content but focuses on engaging the learner in an interactive learning process through group work. SGLM differs from GBL due to the structure and organization of the process as well as the accompanying techniques. It takes the form of transformative teaching where the learners focus and direct the learning for transformation of self and their world. The methods enhance employability skills and a genuine paradigm shift on learners thinking when directed by an effective trainer. The method is based on situational analysis where the trainer and trainees decide on what is most appropriate to learn and the expected

learning outcome. The model is used with other complementary method, where the trainer acts as an organizer or facilitator.

Group learning depending on how it is facilitated can also be referred as cooperative/collaborative or peer learning, where the group shares perceptions, motivation and goals. The elements of group learning model are: clear and positive interdependence between learners, face-to-face interaction, individual accountability, emphasis on interpersonal and small-group skills, and group review to improve effectiveness (Faraday, Overton & Cooper, 2011). The group structure includes values, roles, norms and relationship which determine the group success. This form of learning involves high level of interaction resulting in effective learning process. The members are able to clarify their own issues, derive meaning from concepts and build upon each other's contribution.

Jaques (2004) observes that group learning helps the learner apply knowledge in problem solving; develop critical thinking skills as well as positive attitudes. Group based learning is capable of facilitating the transfer of some latent skills during interaction. Furthermore it enhances both cognitive and social development of learners and encourages active learning and self-reliance. GBL provides the trainees with opportunities to express themselves and learn from each other as well as explore possible ways to solve certain problems as they contextualize their learning to real situations. When using GBL as an instructional model the learners are grouped in small learning teams and work in cooperation to solve a common problem and perform a specific task facilitated by the trainer. They work and cooperate, helping each other to achieve the meet the groups expected outcome and group goal (Terry & Marguerite, 2006). Performance is through group activities where member's interact with each other, exchange information and knowledge and work as a team. This learning model encourages unity and social cohesion among the trainees as they work through the tasks (Sweet & Michaelsen, 2008).

According to Majumdar and Shayamal (2009), group based learning model cannot be applied using traditional methods as there are specific techniques that enhance achieving of the desired learning outcomes. Careful selection of the appropriate techniques to enhance acquisition of intended skills is required. To support these techniques during the learning process suitable training materials are developed. The intention is to focus more on the learning process than on the content, so that emphasis is on active, participatory techniques rather than one-way instruction from the trainer. In GBL the trainer and learners are partners in a learning process but take different roles and responsibilities. Together they identify

training needs, formulate objectives and agree on activities and techniques as proposed by the trainer.

Strijbos (2008) observes that the trainer develops and provides a framework for productive learning processes and the group ensures the best use of the learning environment for meaningful learning experiences. GBL method recognizes prior learning as well as knowledge and experience among the group members and such and this provides mentorship and role modeling to the group. According to Henschke (2008), the trainer should recognize, respect and appreciate learners' experiences, competences and their contribution to the learning process as a motivation. Trainers must adopt delivery approaches that actively motivate and build the learners capabilities across the board.

Kendall and Harrison (2007) observes that training methods have grown from instructions during the early stages of educational development to facilitative modern methods in the present education and training set-ups, thus giving the learner more control of the learning process than the trainer. Certain instructional models and techniques have come into existence with accompanying frameworks to make the best out of every trainee through innovative, efficient and effective instruction and SGLM can be among these training strategies.

In traditional training and learning methods, the trainer directs the learning through memorization and recitation techniques (Mondugwa, 2012). The process is trainer-centered and learning is individualistic, the learners rely on the trainer, as the custodian of knowledge and information (Slavich & Zimbardo, 2012). The methods do not give room for learners to discover and create knowledge but memorization of theories and principles is at the highest, making it difficult for the learners to transfer the learning to everyday life situations. Traditional methods do not enhance self-confidence, critical thinking and problem solving skills but promotes individualism and dependency on the trainer. In the traditional learning set up, learners are generally regarded as passive recipients of the educational content, which they mostly memorize for the purpose of passing examinations.

According to Gwamoiza, Haidara and Schniepper (2013), group based learning takes a non-formal approach to education and training and has a long tradition in youth work at all levels. Though it has not always been explicitly designated as such; interactive learning is a long established feature of non-formal training in the youth fields. It directly relate to the objectives of youth training which require the development of personal and interpersonal competences beyond the acquisition of specific knowledge. As envisaged in Kenya National

youth policy (GOK, 2006), managers, leaders, teachers, trainers and parents should identify new ways of educating and training the youth to ensure an all-round person. GBL motivates and promotes interdependence and accountability and would help the vulnerable youth uphold the values of commitment other than what they are committed to. This will enhance their engagement to productive life.

A lot of debate has been going on the best practice in vocational pedagogy, considering that vocational programs have different level/types of trainees and conducted in varied environments. The learning requirements for vulnerable youth are inevitably different from their counterparts in formal systems. Consequently trainers must recognize and adapt training practices that respond to these differences, since the method has the greatest influence on whether a particular attribute is achieved or not. According to World Bank (2015), like adults, vulnerable youth are aware of specific learning needs generated by real-life events such as handling relationships, divorce, parenting, antisocial behavior and lack of jobs. In adult learning their needs and interests are the goal posts and serve as pointers for training activities, likewise the need to empower the vulnerable youth socially and economically determines how the group learning is structured.

# 2.7.1 Benefits of Group Based Learning

Work groups on youth programs foster positive youth development through pursuits that help them acquire and practice skills, attitudes, and behaviors required to effectively lead sustainable livelihoods. It is now appreciated that the traditional institutionalized form of learning cannot be able to cater for all the training needs among the young people, hence the need to put in place a more inclusive approach for youth training. To further complicate these issues, there are no policies or support system developed to assist youth trained through non-formal programs reconnect with training institutions for certification (Sarkisian, 2009).

Reynolds (2005) a proponent of group based learning describes the main benefits for group based learning as: provision for active involvement of learners; ability to tolerate ambiguities during group discussions and come to a consensus. This provides a varied learning environment to address the diversity of learners. The method further provides a sound base for the development of skills required for employment and foster interpersonal competencies valued in social and work environments. According to Otten and Fennes (2008), GBL enhances learners' achievement of a common goal, improve unity and interpersonal relations. The process also enhances their leadership skills as they take up group

leadership roles at different stages through the group task. They are exposed to decision making which cannot adequately be taught formally yet very vital for self-development and productive life. In practice the learner gains more confidence to articulate their views, as they discuss and present their ideas during group task, overcoming fear of speaking in public and are better prepared for life tasks. It makes possible to accomplish tasks that are too difficult to achieve as individuals, offers diverse opinion from different participants, allows peer teaching as well as providing structures where learners can be able to practice skills applicable to professional and work situations (Strijbos & Martens, 2005).

According to Neomai, (2008) group-based learning has been used in an Information, Communication and Technology (ICT) class room teaching in Malaysia to determine its impact on student learning and reactions towards the instructional method. The learners worked in groups using multimedia and web technologies to construct their projects; a technology-supported learning framework was established. A survey was then conducted to ascertain the reactions of the learners towards this mode of teaching and learning. The results showed that in group-based method, learners learnt by cooperating and interacting with each other and participated actively in the learning process. Furthermore the learners were able to cultivate teamwork, communication, time management, accountability and interpersonal skills, in view of this, the researcher hope to inculcate the same skills through the method.

According to Kenny and McLaren, (2015) group-based learning is used extensively in children, youth, adult classrooms and tutorials in Australian education and training system. It is a learning and teaching strategy used to advance learners' interpersonal, communication and team work skills. In addition to the high value placed on GBL in universities and work places, GBL is not only effective in advancing an individual's academic achievement, but also their critical thinking, social interactions, communicative behaviors, self-esteem and motivation. Group-based learning creates an environment in which learners can practice, gain and improve soft skills such as leadership, communication, social and conflict resolution skills.

It is important to note that simply placing learners in groups and creating group-based assessment tasks may not necessarily result in learners developing interpersonal skills and practice. The learning process need to be intentionally structured and specific instructional techniques appropriate for the desired skills used. This is done to enhance learning and ensure that the desired outcomes in terms of skills are attained. Research has shown that employers seek workers who have other skills alongside technical competence and group based learning

has proved successful in enhancing acquisition of these other skills when adopted as an instructional model (Odo, Adenle & Okwori, 2012).

Modern education and training developments have changed instruction methods to facilitation while the role of the trainer has changed from a transmitter of knowledge to a facilitator of the learning process (Stewarta, MacIntyrea, Galeab & Steelca, 2007). This requires skills to enable the trainer establish an interactive and effective learning opportunities for the learner to make the most from the process. Trainer centered approach that transfers information should be replaced by interactive approaches where trainee participation is dominant and focuses on developing a holistic person in line with the human development needs and knowledge creation stages. This means that when used on the vulnerable youth, they will be able to acquire the skills that enable their integration into the community and fully participate in self and national development.

Kechagias (2011) points out that evaluating group based learning tasks is different from traditional method. The aim of the evaluation is to ensure achievement of the group task and the acquisition of skills that would help the member contribute towards their personal development. The traditional methods of evaluation used exams, the practice lacks connection to the day to day life of the trainee as the trainees learn to pass exams rather than acquire skills and attitudes. While in GBL, competency is evaluated by observing the behavioral change among the group members as they perform certain tasks or by judging the product as a learning outcome. The approach involves learning by action and taking an active part in work related activities, problem solving and completing tasks (Mudhukar, 2003). This process provides room for individual trainees' growth (Kechagias, 2011).

# 2.7.2 Organization of Structured Group Learning Model

There are no specific guidelines on how a GBL setting (i.e. learning environment) should be designed. Enkenberg (2010) notes that there are considerable variations regarding the quality of interaction and the learning outcomes resulting from differences in group size, instructional techniques, supporting technology and the time allocated for the training. This makes GBL not only concerned with the learning outcome (skills acquisition) but the learning process as well. Considering that individuals have different learning styles, varied techniques should be applied to ensure that each trainee benefits. There are those who understand better through seeing (visuals) others learn better through audio meaning that they will need to listen to someone or voice to understand while others learn and retain better by manipulating the resources (kinesthetic) they would need to handle and work with the

resources to create meaning from the content. Therefore given that the learning group may comprise of five members, interaction may involve employing several techniques during the training process to take care of individual learning styles and differences. Millis (2010) identifies interaction in group based learning in terms of group discussions, group projects (problem solving), academic games, simulations and role plays.

It is the responsibility of the trainer at whatever level to impart the knowledge, skills and desired attitudes to the trainees. The quality of the training process determines the productivity level (Industrial Skills Council (ISC), 2011). The organization of the training process should allow the learners to own the skills, concepts and apply them across a range of situations. According to Strijbos (2005), the principles of group learning, (positive interdependence, accountability, team formation, and group structure) can be strengthened by the manner in which the groups are organized, size of the group, modalities of performing the task and the way in which the outcome is evaluated. The learner's cognitive and social development can be addressed through the approach used to facilitate the training.

In GBL interaction is conceptualized at group formation levels to enhance relationships between group members and development of those relationships to actual communicative acts thus providing further insight into the importance of the organization of the learning process. This enhances the acquisition of the intended skills during training. UNICEF (2011) notes that to arrest the interest of the youth during training, they should be involved as partners not as clients or learners, where they select the environment, plan the learning experience and own the process hence the relevance of group based learning approach. The involvement of the youth in selecting skills and raw materials to use while producing craft items is crucial in enhancing the acquisition of creativity and innovation skills. Their interaction with the learning activities should enhance the development of the right attitudes, confidence and ability to network and contribute to the group and eventually to the community. Since the vulnerable youth may not have the opportunity to access these important skills, proper structuring and planning of the training process may contribute towards achieving the objectives of SGML model.

# 2.8 Techniques Used with Structured Group Learning Model

According to Tippelt, Amorós and Antonio (2011) there are effective complimentary techniques used with group based learning. The techniques offer the learners an active

participatory environment during learning and could also be used with this model and they include:

Role Play: This is where the trainee uses their own experiences to play real life situation. It is a participative method, which increases the participants' self-confidence and gives the learner an opportunity to understand and accept other people's point of view. This technique is especially valid for social learning not only centered on knowledge acquisition but also on the development of skills and attitudes that enable learners practice and apply to real life situations. The content and the roles or situations are pre-set and the play outcome is left open. During the role play learners have to take decisions based on real or hypothetical model situations defined by a set of rules that govern their fictitious reality. The method enhances practical problem solving skills, motivate the learners and encourages creativity. This method was used in the study during the skills training, where members played various roles interchangeably as they performed the group task.

Group Discussion: This is a two way communication between the participants. It gives the trainees active learning experiences as they share experiences, ideas and attitudes giving room for the trainer to listen as they talk. The trainees were given a task to design and develop a craft item which they discuss through in planning and implementation. When well applied the method contributes towards transfer of learning, stimulates thinking and creates interest. This technique helps to enhance employability skills such as communicating and listening, leadership, self-confidence, decision making, team work and time management skills. The discussion process also builds respect and appreciation among the members thus enhancing unity.

Games: Also referred to as academic games and involve dividing the group into teams, then introduce a specific game to the teams and allow them to compete against the different teams. The trainer must be conversant with different types of games that enhance learning to be able to select appropriately. Ability to control the learners during this process is very important as it can result to mere exercise and waste of training time. If well selected and coordinated this technique to promote team work, ability to coordinate tasks, time management as well as social cohesion.

**Demonstration:** This refers to any planned performance of a practical skill, scientific principle or experiment. It is transmissive but effective method to impart practical skills. The trainer carries out the process as the learners watch then replicates the procedure. It is among teaching techniques and can either be done using models or real things. Demonstration

technique is not applied singly but is supported by explanations as well as questions and answers to enrich the impact. The method builds the learners' confidence as they manipulate materials and tools to produce tangible items. The learners also acquire occupational skills that promote safe handling of tools and materials reduce damaging of tools and material wastage. The learners are also able to practice their creativity and innovativeness as they repeat the demonstrated skills in their learning groups. It is during replicating the skills that learners were able to be assisted by those who were fast in learning reinforcing the interdependency as a characteristic of group based learning.

Lecture Method: This is an oral presentation of information by the instructor; it is also among the transmissive methods. It is good for transmitting ideas, principles and concepts i.e. theoretical knowledge. During lecture the instructor is very active talking while the learners only listen and perhaps take notes. It does not provide room for learners' involvement which limits its usefulness in teaching practical skills and especially for low level learners like the vulnerable youth. However, in this study this technique was only used when introducing concepts and explaining processes and it was supported with other participatory techniques.

**Group Projects:** Learners work through a series of tasks or a problem, culminating in the completion of a tangible product. The learners work together as a learning group. In this study individual learning groups selected a project after the demonstration, which they worked through and presented as a group project for evaluation. The method enhances teamwork, self-confidence, network, creativity, problem solving and partnership as learners work together to accomplish a task and get a group score.

**Simulation:** This involves engaging the learners with some models that represent the real situation. In this study this was done using programs downloaded from the internet where the trainees were able to learn skills from simulated lessons on **yu** tube programs. The method enhances the use of technology, information literacy, thinking and listening skills.

**Supported Learning:** Involves computer assisted learning where the trainer incorporates the computer and internet as training resources. During training the trainees used computer and smart phone to access internet to view craft designs, colour schemes and other related information. This method enhances the use of technology among the trainees as well as ability to search for information related to their engagement. Through this technique the learners are able to use the phone for education and information other than for entertainment and social interactions.

#### 2.9 Theoretical Framework

This study is embedded on social learning theory which is associated with Albert Bandura's work in the 1960s, and transformative theory of learning associated with Mezirow, (1997). The two theories have something common as they explain how people learn new behaviors and attitudes applicable to the everyday life. The social learning theory explains how people learn new behaviors, values and attitudes (Bandura 2006; 1998). The theory emphasizes adoption of behaviors through social interactions with other people and the environment, where the learners are able to observe modeled behaviour, attitudes and emotional reactions from others and replicate the same. It focuses on the learning that occurs by observation and modeling within a **social context**, which is embraced in group learning. SGLM is based upon this practice, in that the selected techniques create an environment where learners can be able to observe and model behavior. The theory talks about how both environmental and cognitive factors interact to influence human learning and behavior. The theory informed the organization of the learning process where SGLM methods provided an environment for social interaction where the group members learnt from the trainer and from each other, then replicated the skills.

Transformative learning theory is interpreted in form of relationships, critical reflection, active experiences and readiness for change on the part of the learners (Mezirow, 1997). Positive change through learning calls for self-awareness on the part of the learners and acceptance of discomfort hence the desire to change. Through the training period the trainees were able to reflect and realize themselves especially during debriefing sessions, while the ability to design and develop a craft product gave them some self-worth and motivation to improve their lives. This development made transformative theory also relevant to the study. Direct and active participation offered trainees an opportunity to derive positive meaning from experiences in the learning environment. Since transformative methods address learning from the perspective of individual, social roles, responsibilities and expectations, the vulnerable youth may not have had interactions and experiences that would result to positive change. However the trainees were able to build trust and supportive relationships in learning groups as they interacted with each other in a conducive learning environment. This partly explains how SGLM facilitated acquisition of the desired skills.

At play also is the adult learning theory by Knowles Malcolm in 1973 which supports that learners validate information based on what is important and beneficial to them. The theory further supports that learners give leadership and guidance to each other based on their

past experiences and demand respect in the process. This explains what motivated the youth to acquire craft skills as they fore saw the associated economic benefit. The theory highly explains the 50% dropout rate during the training as some trainees did not foresee the immediate benefits of the skills learnt. SGLM foster leadership, guidance and respect among group member through rules and group values, creating room to learning from each other. Considering that the vulnerable youth are in a transitional stage to adulthood, the learning approach applied produced intrinsic reinforcement such as ownership, confidence, self-esteem and a sense of satisfaction. According to Henschke (2008) this requires the learning content to be organized based on valid needs of the group members and training to take place within a familiar environment and convenience, while the skills learnt also related to their desire to improve their livelihoods

# 2.10 Conceptual Framework

Figure 1 represents a pictorial relationship of the variables under study. The study determined the effects of SGLM on enhancing acquisition of vocational, employability and lifelong learning skills among the vulnerable youth groups. The independent variable is SGLM which entailed several techniques like group discussions, role play and simulation, group projects and games used to train the treatment group. While traditional training methods referred to; lecture, demonstration and question and answer methods used on the trainees in the control groups. SGLM is conceptualized as treatment or independent variable. It is the strategy that was used to train the treatment group in craft skills and was expected to enhance acquisition of occupational skills, employability and lifelong learning skills which formed the dependent variables. The independent variable was manipulated using different training techniques.

The research instruments were constructed to capture the elements of the dependent variables in the conceptual framework which form the objectives of the study. The possible influence of trainees' characteristics such as age, social-economic background, individual interest, attitude, and gender were taken as the intervening variables most of which were controlled. Level of education, age and gender was controlled by the fact that the groups' membership was already defined by the status of their group entry behavior. A mixture of Kiswahili and English was used as the mode of communication during training and this controlled for the language barrier. Individual attitude and interest was controlled by involving all the group members to select the craft skills and materials they wanted to train

on. Also having an interest in craft production skills for income generating activity was among the conditions used to select the groups.

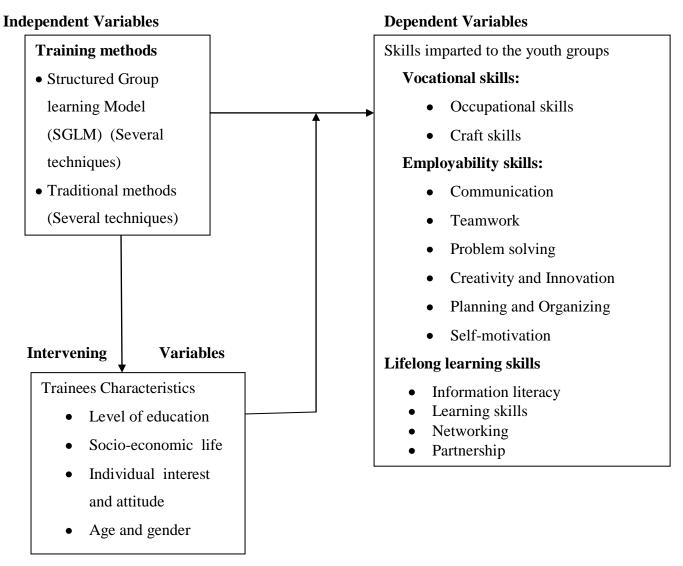


Figure 1: A conceptual framework showing the relationship between independent and dependent variables of the study

[Source: Self View (2017)]

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter describes the research methodology that was used in the study. It describes the research design, location of the study, population of the study, sampling procedures and sample size, instrumentation, data collection and data analysis procedures.

# 3.2 Research Design

The study employed quasi experimental design with static nonequivalent group with Posttest interventions. According to Borg and Gall (2003) the design is appropriate when one is interested in the effects of an intervention in cases where random assignment of subjects is not possible. The design helps to identify groups with similar characteristics as possible to the treatment group, in terms of baseline (pre-intervention) (White & Sabarwal, 2012). The design also allows the researcher to manipulate the groups with minimal interruption of their normal set up. Static nonequivalent group with two already existing groups was used. The groups received the same skills training simultaneously but using different methods. The research design is represented as shown on Figure 2.

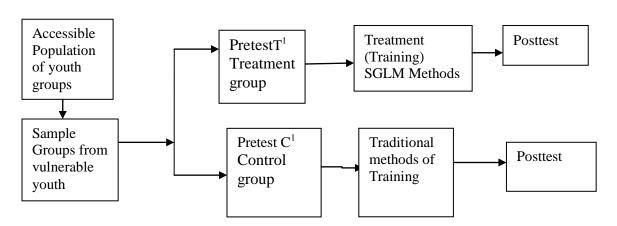


Figure 2: Non randomized pre-test posttest group design.

[Source: Self View (2017)]

# 3.3 Location of the Study

The study was conducted in Nakuru County which has nine sub counties namely; Nakuru municipality, Bahati, Njoro, Molo, Rongai, Olenguruone, Rongai, Naivasha, Gilgil and Mbogoini. These are multi ethnic sub counties within the proximity of Nakuru town and

were selected due to the existent of constituted organized groups of vulnerable youth. The main economic activities include farming, hawking, artisanal ventures and undefined businesses. The main economic engagement for most of the group members are activities such as farmhand, hawking and menial jobs. Together with the individual member's daily engagements, each group has an income generating activity that binds them together. The activity is determined their host sub county and proximity to Nakuru town. Figure 3 shows the map of Nakuru County with the nine sub counties.

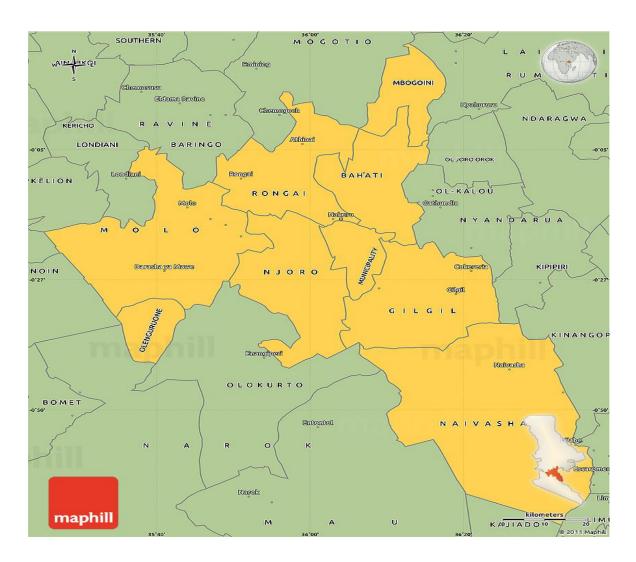


Figure 3: Nakuru County map [Source: assembly.nakuru.go.ke/about-assembly/nakuru-county-on-the-map/]

# 3.4 Population of the study

The target population of the study was all the members of the 10 vulnerable groups between the age of between14 to30 years. Each youth group had a record of 30 members registered but consistency and active participation in group activities reduced the membership

to 20 youth who formed the 200 identified vulnerable youth in Nakuru County. The age group was ideal as younger people are more motivated and eager to learn than older people who are challenging to engage and motivate. These groups have been formed by youth who dropped out of basic education programs at different levels and moved to Nakuru in search of a livelihood from menial jobs and antisocial activities. As an initiative to address insecurity and youth idleness in the respective sub counties, faith based and non-governmental organizations identify the vulnerable youth. This is done through community leaders and social workers register them and attach them to these organizations for psychosocial support. Those without children are put in vocational centers for institutionalized training while those with families are encouraged to form groups and engage in income generating activities. The latter category is what this study dealt with. The group members are bound together through registering with the sponsoring organization, their past experiences and a common goal to better their lives.

Out of the 10 groups the accessible population was four groups with a membership of 120 with characteristics which were relevant to this study namely. A girls only group from Nakuru East- Municipality sub county based at the Philadeldia church, a mixed group based in Subukia- Bahati sub county under the Catholic church, other two groups of men and women, Tumaini based in Njoro and Jitahindi in Molo sponsored by an NGO called Help Mission Development Services (HMDS). Each group had a membership of 30 youth though the committed members in each group reduced to 15 as the training continued. There were two categories among the groups involved in the study; those who were fully sponsored and those who were partially sponsored. The fully sponsored ones were provided with daily up keep and their kids school fees was also catered for as they engaged in different activities while those on partial sponsorship received assistance in form of training fees/materials only. The partially sponsored groups attended the training on selective days as they were involved in small businesses like hawking (Malimali), second hand clothes hawking, mobile hair stylist, car wash and shoe making as a source of livelihood. These groups were chosen to participate in the study to enhance their craft, employability and lifelong learning skills for sustainable livelihood.

# 3.5 Sampling Procedure and Sample Size

The study identified the community trainers and vulnerable youth groups through snowballing sampling method. Purposive sampling was used to select 29 trainers who are not based in learning institutions but conducted non formal training for the county and nongovernmental organizations. The four identified groups had 120 registered members (see table 2) but 60 members were purposively selected based on their location, dexterity and a predefined criterion to suit the study. This method of sampling is ideal as according to Kombo and Tromp (2008), it allows for selection of a sample that suits the study. The criteria used were their involvement in income activities that could accommodate craft skills training as well as previous engagement in youth empowerment initiatives among others. The sample was drawn from the four participating groups whose 60 members were used in the study. Since they were operating in different sub counties, two groups formed the treatment while the other two formed control group. Four sub counties were selected for the study; Nakuru municipality, Bahati, Njoro and Molo (see figure 3/ appendix 8). Out of a sample size of 60 youth, 30 formed the treatment group (T<sup>1</sup>) based in Nakuru East and Subukia, and the other 30 control group (C<sup>1</sup>) were the groups from Njoro and Molo sub-counties. The treatment groups were further broken into small learning groups of five members during training. To participate in the post testing process the trainees in both groups were supposed to have consistently attended 90% of the training sessions. Thirty members in the treatment participated in the training but only 20 youth in the treatment and 30 from the control group qualified for post-test in data collection. This selection was based on consistency in attending the training as per the attendance register. The number used in data collection was 59 for the treatment and the control group. This number was ideal as Borg and Gall (2003) recommends 15-30 respondents per group in experimental research design, a view that was also supported by Kathuri and Pals (1993). Furthermore, the sample is greater than 30 and qualified for making inferences. This size is ideal for effective group and practical class learning as it makes room for easy facilitation and group control.

### 3.6 Instrumentation

Five types of instruments were used for data collection and given abbreviations for the purpose of identification only (*Appendix 1, 2, 3, 4 & 5*). Three types of questionnaires were used; one for the trainers abbreviated as (QTrs. 1) one for the trainees (QT 2) and another that was used to identify the challenges encountered after SGLM training (QCS 3). Questionnaires QTrs.1, QT.2 were used to collect baseline (pre-intervention) information related to training methods and the level of selected skills among the youth in the treatment and the control groups participating in the study. The interview schedule abbreviated (InS3)

and observation check list abbreviated (OCL 4) were used on the treatment and the control groups for post testing the effects of the training on skills acquisition. The instruments were developed to capture information on the level of acquisition of selected skills in both treatment and control groups. The purpose for pretesting was to ascertain the level of vocational, employability and lifelong learning skills before training while the post testing was done to assess the level of association between SGLM and skills acquisition among the treatment and control groups after the training. The pre intervention questionnaire contained four sections; Section A contained items on background information of the participants, section B contained items on craft skills, section C dealt with occupational skills while section D dealt with employability and lifelong learning skills. An observation schedule with items on the four areas of skills under the study was used to rate the performance on practical skills acquisition of craft, employability and lifelong learning skills in the treatment and control groups. This was done through observing how the trainees performed different tasks during group project implementation. The researcher noted the observed performance against a predefined check list of a four levels rating. Observation checklist was ideal for this study as according to Lozano, J., Portell, M., Losada, J., Anguera T., Chaves, S. and Moscoso, S. (2018) observation helps to understand and quantify behavior and discover trait that are not directly visible especially in psycho-pedagogical studies. The responses for the guided interview schedule were recorded as the participants spoke. The interview schedule was only used for triangulation purposes. The types of instruments used were selected inconsideration to the nature of respondents and are advantageous among people of low level of education and allows the researcher an opportunity to clarify the information to the respondents (Frankel & Wallen, 2000).

### 3.6.1 Validity

To ensure content validity all aspects of dependent variables under study were captured in the instruments. Assessment was also done on the format of the items, appropriateness and comprehensiveness of the content in the instrument as recommended by Coryn, and Hobson, (2011); Bluman, (2000). The language used on the instrument was simple to ensure that the respondents understood and got the meaning. This aspect was improved by the fact that respondents were guided through each item. While the observation check list was administered by the researcher. The instruments were validated by experts from the department of Applied Community Development Studies to determine their ability to meet the objectives of the study.

## 3.6.2 Reliability

Reliability of the instruments was determined through a pilot test. Two church groups in Gilgil Sub-County with similar characteristics as the sample were used for piloting. Mugenda and Mugenda (2003) recommend piloting of research instruments before use to ensure consistency of data. A Cronbach alpha, reliability coefficient of 0.7 and above was to be accepted for this study. Cronbach alpha is a measure of internal consistency of instruments and used to calculate the reliability of items not scored as right or wrong, it is also good for instruments that require only one test administration (Frankel & Wallen, 2000). The instruments were pilot tested and a calculated reliability index of 0.892 was obtained, which was acceptable for the study.

#### 3.7 Data Collection

The researcher obtained a research permit from National Commission for Science, Technology and Innovation (NASCOTI) before embarking on training (Appendix 9 & 10). The researcher then contracted two research assistants who were informed on the objectives of the study and data collection procedure for the study. With the help of the Community development officers from the involved organizations, community trainers and vulnerable youth groups were identified. The groups were then informed on the purpose of the study and the benefits of vocational, employability and lifelong skills then a pre intervention procedure was carried out. The control groups in Njoro and Molo were trained on paper, feather and plastic craft skills (junk art) by a trainer for one month using traditional training methods while the treatment groups in Nakuru East and Subukia were trained by the researcher on same skills for one month using SGLM. The training was carried out simultaneously on the treatment and control group and some part of the data was collected during the training. Training on the treatment group was done following a 7 steps model or procedure as shown in Figure 4. After the training each participating group was given a project to produce a specific craft item, during which an observation was conducted to posttest acquisition of the intended skills in both groups after the training and the results recorded.

## 3.7.1 Structured Group Learning Model Organization

The study adapted and modified the nine steps Group Learning Model from Swiss foundation Contact shown on appendix 7. According to Gwamoiza, et al. (2013) the Swiss foundation Contact model was successfully used in Uganda to train informal youth and women groups in vocational and business skills in 2013 but the training duration was nine

month while in this study the training took three month. Based on this fact the researcher developed a seven step Group Learning Model to follow during training as shown in figure 5. The seven steps group learning model was specifically structured and duration reduced to suit the study, and that is why the model was named as structured group learning model (SGLM) instead of Group Base Learning (GBL). The model was used to train the treatment group but not the control group.

## **Seven (7) Steps Structured Group Learning Model**

This study adapted the learning group model shown on figure 3, which was modified to reduce the number of steps from nine to seven, and the training time from nine to three month. These changes were done to suit the target group and the environment of the study. The training model developed contains learning activities which are designed to enhance the skills through the learning process which combined activity, reflection and application. The steps shown in figure seven were followed sequentially to form the structure of the training process applied in this study.

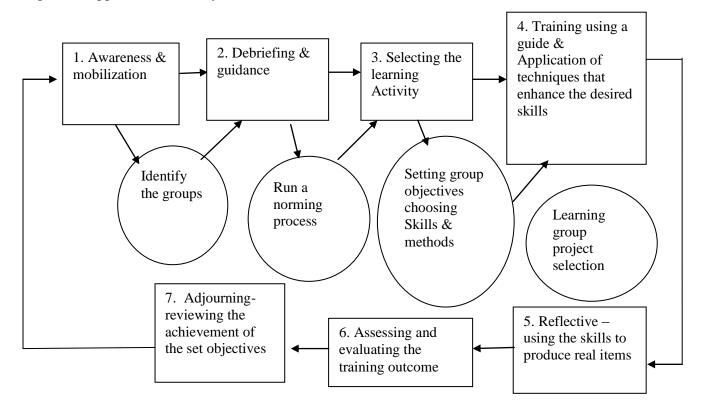


Figure 5: Own View of the Seven (7) step Structured Group Learning Model

## 3.7.2 Steps in Organizing the Training

The seven steps shown in figure 5 form the cyclical nature of the training process which was organized and conducted as follows:

# **Step 1: Informing**

This involved creating awareness and mobilization where the researcher/ trainer introduced the groups to the objectives of the study and the importance of occupational, crafts employability and lifelong learning skills to their daily lives and their future business engagements. This was done using stories, puzzles and simulations. At this stage the groups were shown different craft products made using natural and recycled materials found within their environment

#### **Step 2: Planning**

This step involved debriefing and guidance. Debriefing was used to give the members a platform for expressing their feeling and share out traumatic life experiences and their coping strategies. This process gave the facilitator an opportunity to appropriately channel the emotions and experiences of the trainees towards the training objectives and the outcomes. The session assisted the group to warm up towards each other and be able to norm easily to engage in group learning. Guidance entailed dividing the main group of 30 to small learning groups of 5 to 6 members and helping them plan for the group activities. Registering the members of each group, and giving each group a brand name helped to identify members in each learning group and was very helpful during outdoor activities. The small groups then used the information given in step 1 to develop their expected learning outcomes (objectives), group rules and select the skills and materials they wanted to use. The group also selected a group leader though this role was interchanged to give each group member a chance to exercise their leadership skills. The techniques used to facilitate this stage aimed at enhancing planning and organization, problem solving, decision making as well as teamwork skills.

# **Step 3: Deciding**

This is an activity stage using the information in step 2. The group identified the materials within their environment and subsequently selected the craft products that they wanted to produce as a group using the materials. At this stage the group looked at different sources of information related to their products to enrich their ideas and product development process. This information was downloaded and projected for the groups on the white wall in the training room while others accessed similar information from their smart phones. The groups were also shown how to get design inspirations from magazines as well as using

shapes and forms within their environment. This was intended to inspire them on designs colours and texture and improve their information literacy, use of technology. This created interest and promoted learning among the group members. At this stage the groups were also introduced to the tools and materials used for crafts and specific details such as preparing the working environment, handling tools and equipment used in craft production, interpreting sketches, verbal instructions and transforming real items into designs and patterns.

# **Step 4: Realizing**

At this stage the groups were trained using pre-prepared training manuals with selected techniques intended to enhance occupational and employability and lifelong learning skills. The groups learnt how to apply the details in step 3 to come up with the actual products. This also gave them a chance to select the right tools and materials used on specific items. This stage was facilitated using simulations and downloads from the internet and group discussion to enhance team work, occupational skills, creativity and innovation and information literacy.

## **Step 5: Reflecting**

This stage is where the trainer needed to get feedback through reflective use of the skills learnt to produce real item. Each group was given a task to develop a product from paper craft, recycled plastic or feather craft product. The choice of product by each group was based on the group interest. At this stage the research assistant was able to interact with the group members and collect some data, while the trainer regulated the learning process of each group, as they manipulated material and techniques learnt in step four. This was facilitated through demonstrations with explanations, real samples and projected visuals. The trainer intentionally applied these techniques to enhance communication; listening and responding skills. The process was also expected to enhance acquisition of vocational skills, learning skills and information literacy as well as ability to interpret written, verbal and visual instructions.

## **Step 6: Evaluating**

This stage involved assessing the training outcome where the trainer and the groups reflected on the previous stages in relation to the individual groups expected learning outcomes developed in stage one and the research objectives. The group together with the trainer and the research assistant evaluated the products and the trainee level of skills. The rating was based on two categories; quality of product and group behaviour during training. The group with the best products and most well behaved groups were awarded gifts as a form

of motivation. This process was done to enhance self-motivation and confidence as members presented and critiqued the products. The step also assessed achievement of the research objectives by giving the individual groups a project to produce similar items learnt in stage 4 within two hours. The researcher used this exercise for post-testing, which was done through an interview and observation schedule.

# Step 7: Adjourning

The groups reviewed their learning outcomes and their achievement. The stage also included a session where the learning groups discussed the problems encountered during the training and production and how they managed the risks in a work scenario. This was done through a guided questionnaire as part of post testing. The group members discussed the weakness and the strength of the process and how to utilize the skills learnt during training. At this juncture the trainer informed the groups of organization and government entities involved in supporting and promoting craft related businesses. This was to assist them in forming partnerships and network cells so as to engage in production of craft items as an alternative business engagement.

# 3.8 Data Analysis

The data obtained was categorical which was analyzed and presented using descriptive (means, percentages and bar graphs) and inferential statistics (Pearson chi square  $(\chi^2)$  as recommended by Kothari (2008) and Borg and Gall (2003). Chi square was used to test the association between SGLM techniques and level acquisition of selected facets of vocational, employability and lifelong learning skills. To bring out the difference between SGLM and the traditional methods, the categorical data obtained was transformed and converted to continuous data by giving it weights. T-test was then used based on the assumption that the variables had continuous data (Agresti, 2013, 2007; Howell, 2007; Tabachnick & Fidell, 2007). This type of statistics is ideal for discrete or categorical data with two or more sets/ groups; it reduces internal validity threat posed by non-randomized assignment of subjects as well as the effects of initial group differences, t-test for independent samples is good for testing the difference in means of unrelated groups (Tunner & Youssef-Morgar, 2013; Thomson & Grissom, 2000). A statistical Package for Social Sciences (SPSS) advance version 22 was used to process the data. The data collected was analyzed and interpreted as per the research objectives. A significant level of  $P \le 0.05$  was used for this study.

#### **CHAPTER FOUR**

#### RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter presents the research findings, interpretation and discussion. The results are presented qualitatively and quantitatively. The chapter discusses the characteristics of the participants and other related information which was captured during data collection as well as important aspects of the participants that related to the study. Post test results from both the control and the treatment groups have also been discussed. The sections have been discussed as per the objectives of the study under the following topics; Characteristics of the participants, Training methods used by trainers for the vulnerable Youth; Acquisition of: vocational skills, employability skills and lifelong learning skills among the vulnerable youth in Nakuru County and challenges encountered when training vulnerable youth using SGLM.

#### 4.2 Characteristics of the Participants

This section describes the trainees' characteristics that were important to the study, which has been discussed under the following sections; percentage of participants who completed the training, status of the participants, vocational skills of interest and level of education and business activities. These characteristics were important to the study as some acted as intervening variables which needed to be controlled. The youth group in Molo used Molo youth polytechnic as their training venue while the one from Njoro used Njoro youth polytechnic as their training venue. The Njoro and Molo groups enjoyed partial sponsorship from an organization known as Human Development Services (HMDS) based in Nakuru town and were used as control groups during data collection. The youth groups in Philadelpia and Subukia were church based, Subukia group conducted its activities in St John Catholic Church in Subukia while Philadelphia group conducted its activities in the New Life Ministries church hall based in Pangani. Both groups received some form of support from the church they were affiliated to.

The numbers that registered for the training and those who consistently attended and completed the training sessions was important. At the beginning of the training both the control and the treatment groups had 60 members and above, but by the end of the one month training only 50% from each category completed as shown in table 2

Table 2: Number of Youth who Completed the Training

Center	Group members	Frequency(f)	(%)
Philadelphia Community Center	38	14	23.3
Subukia Catholic Hall	30	16	26.7
Njoro Youth Polytechnic	32	13	21.7
Molo Youth Polytechnic	30	17	28.3
Total	130	60	100.0

The Philadelphia and Subukia group were the treatment group and from table 2 only 50% completed the training. Njoro and Molo were the control group and the same percentage of 50% completed the training. Though each group registered membership of 30 youth and above at the beginning of the training, the inconsistency in attendance was the same for the control as well as the treatment. The post test was only done to those members who attended the training consistently for a month. This drop out could be associated to other responsibilities like single parenthood and lack of financial support to take care of family needs, as well challenges that the vulnerable youth under and deny the a chance to personal development as supported by Adrienne and Fernades (2014).

## **4.2.1 Status of the Participants**

The status of the participants in terms of age, gender and marital status was important as it is a significant attribute of most vulnerable groups, which affected their socio economic life and their attendance to the training. Marital status of the vulnerable youth was an important characteristic as it indicated the level of responsibility borne by the group members which affected attendance and called for a more flexible training schedule. The results are as presented on table 3:

Table 3: Status of the Participants

Clara de vistina	A D l 4	Frequency	Percentage
Characteristics	Age Bracket	(f)	(%)
Age	14- 20	46	76.7
	21-27	14	23.3
Gender	Male	8	13.3
	Female	50	83.3
Marital Status	Single	47	78.3
	Married	13	21.7

Majority (76.7%) of the youth were between the ages of 14 to 20 years while only 23.3% were above 20 years. This information reveals the tender age at which the youth drop out from the social fabric and become vulnerable. The youth is a transitional stage and in Kenya, this age group is still in secondary school or in colleges. Therefore majority of the vulnerable youth get to be independent before completing their education programs unlike the contemporary youth and this affects their transition to responsible adulthood and ability to fit well in the society (Omolo, 2010). Due to their young age, these youth do not have any form of identification documents and cannot therefore access any social support services from the government. Furthermore some NGOs are hesitant to assist them in any way due to suspicion of their past behavior and lack of identification documents. Anybody applying for an identity card (ID) in Kenya must have a recommendation note from the local administration or a birth certificate, which may be difficult for these youth as they do not have an organized social structure. This age affected the way they received and internalized concepts during training.

Gender was also an important factor in the study as part of the intervening variables. About 83.3% of the participants were female while 13.3% were male. The results indicate that the male participants were either not interested in the training on craft skills or had no time for the prolonged training. The small number of male participants may have resulted from the fact that the groups had few male members or the male members associated the making of crafts with women and hence dropped out of the training. This may have resulted from traditional/ cultural beliefs that associates hand craft skills as activities for women, children and people with disabilities hence the low appeal (Christine, 2013). This being the

case the males preferred skills that are naturally associated with men such as leather work, shoe making and art work.

Majority (78.3%) were single mothers as shown on Table 3 who gave birth in their early teenage years. The result also reveals that the vulnerable youth groups had children just like the rest of the society, but it also means that if issues of vulnerable youth are not addressed, they will produce a generation of children who will also be vulnerable. Majority being single parents placed a heavy financial responsibility on them in that they had to share their time between parental responsibilities and the training. These parental responsibilities have interfered with their involvement in meaningful empowerment programs such as, institutionalized training programs or fulltime jobs, due to lack of time as they have to take care of their young children and fed for them (Muthee, 2010).

## **4.2.2** Vocational Skills of Interest Among the Participants

This characteristic was important as it was among the criteria used to select the participating groups as well as the content to be covered during the training. The skills were; Dress making & tailoring, Hair & Beauty, Soft furnishing, Art work, Leather work & shoe Making and Fashion Accessories. The skills are crafts related and this made the participants see the benefits of the intended training. Table 4 shows the skills that the participants were interested in if given a chance.

Table 4: Vocational Skills of Interest Among the Participants

Skills	Frequency (f)	Percentage%
Dress making & tailoring	20	33.3
Hair & Beauty	21	35.0
Soft furnishing	6	10.0
Art work	4	6.7
Leather work & shoe Making	3	5.0
Fashion Accessories	4	6.7
Others	2	3.3
Total	60	100.0

The results in table 4 shows that majority (35%) and 33.3% of the participants desired to train in hair & beauty and dress making & tailoring respectively. This could be explained through the results in table 3 which shows majority (83.3%) of the participants being female

and therefore their preference for dress making and hair and beauty skills may seem obvious. The results in the table 4 may also reveal that the vulnerable youth have an interest to learn various skills in order to fulfill their dreams and aspirations. In addition their skills of choice are craft related which take short durations and can be trained through non formal programs. According to the theory of adult learning which informed the study, youth and adult learners will only learn what they are interested in and when they foresee benefit from the learnt skills (Henschke, 2008). This fact may be what could be driving the vulnerable youth in selecting practical skills which they could use for sustainable livelihoods. However all the skills shown in table 4 are craft oriented and combined well with the craft skills introduced during the study. The youth who agreed to participate and complete the training may have seen the possibility of applying the skills in future as their desired skills in table 3 would require to be paid for.

## 4.2.3 Participants Involvement in Income Generating Activities

Involvement in an income generating activity by the participants was also an important criteria used in the selection of the trainees. This aspect manifested their desire to earn a living and contributed towards their motivation to learn craft skills. Their involvement in these activities also informed the decision to plan the training in a way that it also gave them time to attend to those activities. The results are as shown on table 5.

Table 5:
Income Generating Activities the Youth are Involved in

Income generating activities	Frequency (f)	Percentage %
Water Vender	4	6.7
Charcoal selling	2	3.3
Selling old clothes 'Mutumba'	10	`16.7
Hawking	15	25.0
Mobile Launderette	3	5.0
Selling fruits & vegetable	4	6.7
Performing Arts & games	3	5.0
Mobile hair stylist	5	8.3
Manual labour/undefined	14	23.3
Total	60	100

From the results, it can be observed that all the group members were engaged in activities that do not need any form of skills training or a lot of finances to start. About twenty three (23.3%) are involved in manual or undefined jobs. This study categorized working in the construction sites, loaders, quarry sites and farm hands as part of manual or undefined jobs. The sustainability of these activities is unpredictable and furthermore the wages are below the minimum wage level recommended by labour laws and may be inadequate to meet the needs of these families (Weeden, 2011). This may have motivated them to learn vocational craft skills that would cushion them from uncertainty and provide an extra source of income. The advantage of craft skills is that one may not need to hire a business premises as the products can be made from their houses or even outdoors. Involvement in income generating activities as a characteristic benefited the study in that the participants had a personal initiative to change their own lives and were not skeptical about training in the selected skills.

## 4.2.4 Role Played in the Group

The role each member played in the group before and during the training was also important to the study. The term official refers to the members who represented the interests of the group in the community and were appointed by the community leaders or the chiefs' office. They are the link between the local administration and the vulnerable youth. They acted as mentors to other members during group activities. The term leader referred to members who had served the group members either as the chair, secretary or treasurer before the training. Though the main groups were further subdivided into small learning groups during training, this characteristic was important as it showed their level of experience and involvement in leadership and decision making by the members. Table 6 shows the result in percentage.

Table 6: Role Played in the Group

Roles	Frequency(f)	Percentage (%)
Official (Local admin. appointee)	7	11.7
Members	45	75.0
Leader (in the group)	4	6.7
Members	56	93.3
Others	4	6.7
Total	60	100.0

The results on table 6 shows that majority (93.3%) of the participants were just group members while 6.7 % were either officials appointed by the local administration/ church organizations or learning group leaders. This result was important as it revealed that most of the members had no leadership skills experience and this made acquisition of interpersonal skills important in this study. Leadership and decision making is an important transferable skill that was of interest to the study as it helps one to take advantage of opportunities as well as make choices relating to their life (Antonio, Kugler & Meghir, 2011).

## **4.2.5** Level of Basic Education Among the Participants

The study was also interested in the level of basic education of the participants as baseline information. The following were the levels of education among the trainees; Primary education standard 8 level, primary school dropout, secondary school form 4 level, secondary school dropout, others (do not know their education status) as shown on table 7. However the study did not compare the level of skills acquisition to the level of education among the vulnerable youth as this was beyond the scope of the study.

Table 7: Level of Basic Education

<b>Education level of the respondents</b>	Frequency(f)	Percentage (%)
Primary Education standard 8 Level	35	58.3
Primary school Dropout	1	1.7
Secondary school form 4 Level	12	20.0
Secondary school drop out	8	13.3
Others (do not know their education status)	3	5.0
Total	60	100.0

Majority (58.3 %) of the group members had an education level of Kenya Certificate of Primary Education which is given after one has completed primary education. Twenty percent had completed secondary school Education while 1.7% had dropped out from primary school education; thirteen percent (13.3%) had dropped out from secondary school program while five percent (5%) represented others who did not know about their education status. However the trainees had no form of certification to proof having completed the different levels of basic education. Ombagi (2012) observes that a certain level of basic education is necessary for a trainee to be able to cognitively internalize and apply learning skills. Furthermore youth without any form of education are more vulnerable to fall into poverty, crime and drug addiction. From the presented results majority of the group members claimed to have a certain level of basic education. However the circumstances that led to their vulnerability did not permit them to see education as a positive empowerment in their lives; but their main concern was how to survive each day. The level of education was important to the study as it determined the language of training and the scope the trainer could cover during training, as well as the type of skills and interactions. It also determined the type of learning resources to be used for lifelong learning skills. This characteristic was highly considered in developing the research instruments, learning group composition, content selection as well as in selecting the instructional techniques and activities.

#### 4.3 Training Methods Used by Trainers for the Vulnerable Youth

The first objective of the study was to determine the training methods used by youth trainers in Nakuru County. This was done to answer the research; what are the training methods used by community trainers to train the vulnerable youth with selected skills in Nakuru County. A questionnaire was administered to 29 community trainers in Nakuru

County to capture responses on how often the trainers used the selected methods; demonstration, group discussion, lecture, projects, group based learning, role play, supported learning, simulations and academic games which were rated as; regularly used, used, rarely used or not used at all while training the vulnerable youth in the county.

Delivery methods also referred to as instructional methods or techniques, form the meeting point for the trainees, the trainer, the content and the environment to enable achievement of the expected outcomes (Petrina, 2011). Therefore selection of appropriate instructional methods to suit the content and the level of trainees is very crucial. The findings are presented on table 8 and discussed in the subsequent sections.

Table 8:
Training Methods Used by Trainers n=29

Methods	Regu	ılarly	Use	ed	Rar	ely Used	Not	Used
	used	-	f	%	f	%	f	<b>%</b>
	f	%						
Demonstration	27	(93.1)	2	(6.9)	0		0	
Group discussion	12	(41.4)	15	(51.7)	2	(6.9)	0	
Lecture	10	(34.5)	12	(41.4)	6	(20.7)	0	
Group Projects	10	(34.5)	7	(24.1)	3	(10.3)	0	
SGLM	1	(3.4)	2	(6.9)	4	(13.8)	21	(72.4)
Role play	3	(10.3)	3	(10.3)	12	(41.4)	0	
Comp. supported learning	2	(6.9)	6	(20.7)	9	(31.0)	11	(37.9)
Simulations	0		1	(3.4)	4	(13.8)	23	(79.3)
Academic games	0		1	(3.4)	2	(6.9)	26	(89.6)

## **4.3.1 Demonstration Method**

Trainers' response was sought on how they used demonstration method while training the vulnerable youth and the results are as indicated on Table 8. Twenty seven out of the 29 (93.1%) trainers indicated regularly using demonstration while training. This means that majority (27) of the trainers used this method to teach practical concepts. Demonstration method is a transmissive method that gives priority to observable behavior of trainees, as they repeat the processes demonstrated to them. It is based predominantly on modeling of knowledge and skills. The trainer shows how an operation is done or how an instrument works after which the trainees are allowed to practice under the trainer's supervision. The method is among the training techniques that give priority to learners' observable behavior hence enhancing change (Petrina, 2011). The method should be accompanied by supporting techniques such as lecture and question and answers so that the trainee is interactively

involved. If not well planned, the method can result to limiting of learners creativity and innovation as they view processes in terms of right and wrong. However it can also be transformative if emphasis is laid on developing the trainees' skills to sequence tasks and shape behaviour as was the aim of this study. A well planned demonstration will enhance occupational skills that promote safe handling of tools and materials to prevent damaging of tools and equipment which in return enhances durability and reduce material wastage as modeled by the trainer. The trainees are also able to apply their innovativeness and creativity skills. Using demonstration with other presentation skills provide the learner with an opportunity to acquire a transformation that results to behavioral change. In SGLM, demonstration was one of the participative or behavioural modification methods used with SGLM model to train the vulnerable youth in vocational and occupational skills.

#### 4.3.2 Group Discussion Method

From table 8, forty one point four percent (41.4%) of the trainers indicated to regularly use the method while 51.7 % indicated that they used the method. This indicated that the method was popular among 27 out of the 29 trainers involved. Discussion occurs when a group of learners assemble to communicate with each other through speaking and listening on a topic or event of mutual interest or a specific topic. It is a two way communication between the participants, which gives the trainees an active learning experience because learners share experiences, ideas and attitudes giving room for the trainer to listen as they talk (Stephen, 2011).

Discussion is among the methods that enhances social interactions and relationships among individual members in the group. Though it was regularly used by the trainers, organization of the method is crucial because it has social benefits to the trainee. When well applied the method contributes towards transfer of learning, stimulates thinking and interest. This technique helps to enhance communication, listening skills, leadership, self-confidence, decision making, teamwork and time management skills and coherent relationships among the members of the discussion group (Faraday, Overton & Cooper, 2011). However the outcome of this method depends on how the learning is organized. The youth in Kenya lack coherence and positive relationships as observed by Kurtz, (2011); Petrosky and Sarah (2007). Individualism among trainees is promoted by an education system that is so much focused on self and competition through examinations. Discussions promote unity and help to value each other's contribution and view each other as a resource, a quality that lacks

among the vulnerable youth. Though this method was being used by majority of the trainers, it had not resulted to behavioral modification among the vulnerable youth as it was not organized to enhance behavioral change.

#### 4.3.3 Lecture Method

From the results shown on Table 8, lecture method was used by 41.4% of the trainers while 34.5% regularly used the method to train vulnerable youth. These percentages indicate that the method was used by 22 trainers out of the 29 involved in the study. Lecture is an expository method involving oral presentation of information by the instructor and may not motivate the youth to learn as it reduces them to passive listeners. It is good for relaying, ideas, principles and concepts i.e. theoretical knowledge and requires the learner to have developed cognitively (Petrina, 2011). Lecture method is not appropriate for low level trainees, but should only be used to support other interactive methods. Based on this observation the fact that lecture method is a regularly used method among the youth trainers in Nakuru County shows that there is need to introduce SGLM. Considering the cognitive level of the vulnerable youth being trained, it is difficult to tell the effectiveness of this method on imparting the intended skills. Lecture method is not one of the techniques used with SGLM model except when explaining concept and procedures.

#### **4.3.4 Projects Method**

The results on Table 8 indicate that 34.5% of the trainers regularly used project methods while 24.1% used the method. This represents a frequency of 17 trainers out of the 29 respondents in the study, meaning that more than half of the trainers using the method. Giving projects to the trainees was popular method among the vulnerable youth trainers but the nature and organization of this technique is what may be important. Most of the trainers used the method in cases where the trainees are expected to carry out a task to demonstrate understanding of the learnt skills and procedures. It is among the methods that assist trainees in processing information, though much benefit can be reaped when organized in a group approach as the trainees are able to learn from each other as well as building the interpersonal skills as observed by Petrina, 2011.

It is very appropriate in practical skills as it helps the trainees gain hands on experience, promotes innovation and creative thinking. The trainees work individually or as a group. The method enhances teamwork, self-confidence, network and partnership as learners work together to accomplish a task (Kersten, 2016). Often, learners not only choose topics

but also the materials and assign a role to each member during the task. When carried out in groups it enhances problem solving skills, cooperation and team building. When the method is properly planned and structured, it enhances trainee's ability to organize materials, generate ideas and solve problems. These are crucial values that would benefit the vulnerable youth that this study wanted to inculcate these skills through SGLM.

# 4.3.5 Structured Group Learning Method (SGLM)

From the results on Table 8, one (3.4%) trainer regularly used the model while 2 (6.9%) indicated having used SGLM, 21 trainers (72.4%) indicated to have not used the method at all. Those who claimed to have used the method was a very small number of trainers furthermore it is not easy to tell how the 3 trainers who claimed to use the SGLM methods were referring to Group based learning (GBL) or SGLM. However the difference between the two methods is in the organization organized the group learning, hence it can be concluded that this method is either not popular or not familiar among the trainers. SGLM is a training facilitation model that uses a combination of methods to deliberately enhance acquisition of desired skills and specific behavioral traits. This model was developed and used on the treatment group during the study to test its effectiveness on enhancing certain specific facets among the vulnerable youth. Based on this result, it is easy to conclude that SGLM was a new concept to the youth trainers as 72.4% did not use the method. However the results also show that the method was not new among the trainers only that it was not a popular instructional model as it is highly involving on the part of the trainer due to its interactive nature. Introducing the model among the trainer and explicitly emphasizing on its benefits especially on the vulnerable youth may encourage the use of the method.

#### 4.3.6 Role Play Method

The results on how the trainers used the method are as shown on Table 8. The results indicate that 12 (41.4%) of the trainers rarely used the method while 10 (34.5%) indicated not to use the method at all. This can be interpreted that 12 used the method some time during training, while 10 indicated not have used the method at all. The result shows that the method was not popular among 22 out of the 29 participating trainers. Seven (7) of the trainers indicated to use the method, which means that some trainers were conversant with the method but the question should be if the trainers were aware of the benefits associated with the method and how did they organize the process for the benefits to be maximized.

However with 22 out of 29 trainers not using the method, then it can be concluded that the method was rarely used by the trainers or they do not know how to effectively organize the group learning to meet the needs of the trainees. Role play enhances individual trainee emotional life and self-concept. It is also a social interaction technique that greatly builds on interpersonal relationships and communication. However for these benefits to be realized planning and organizing of the method is important.

Role play as an instructional method is productive when used to impart life skills as trainees use their own experiences to play real life situation. It is highly interactive and increases the trainees' self-confidence and gives the learner an opportunity to understand and accept other people's point of view (Mondugwa, 2012). This technique is especially effective for social learning not only centered on knowledge acquisition but also on the development of skills and values that can enable learners progress from theory to practice through application to real life situations. The content and the roles or situations are pre-set and the play outcome is left open. During the role play learners have to make decisions based on real or hypothetical model situations defined by a set of rules that govern their fictitious reality. The method enhances practical problem solving skills, motivate the learners and encourages creativity. Due to its associated benefits role play was one of the techniques used with SGLM in this study to enhance acquisition of selected employability skills.

## 4.3.7 Supported Learning Method

This is an automated approach to training/ learning which utilizes electronic and internet platforms for communication and access to information. From the results shown in Table 8, 37.9% of the trainers did not use the method at all, while 31 % showed that they rarely used the method. Only 8 of the trainers indicated having used the method. From the results it can be observed that the method was never used by majority of the youth trainers. This may be associated to the environment where the training took place, mainly in the field or in church and public halls, which made computers and electronic media inaccessible to the trainers. However support to learning does not only come from the computers but smart mobile phones can also be used. This method can be facilitated or self- directed. However in this age of information, communication and technological development, ability to apply modern technology which includes computers is very crucial as it enhances information literacy, networking and access to social support services (UNDP, 2007). According to

Petrina, (2011) the method generally provides independence from the problems of arranged class room which are also out of reach for the vulnerable youth.

An increased use of computer assisted learning would improve computer literacy skills and enable the vulnerable youth access and make use of community resource centers and ICT. Hubs in their sub-counties to register for identification cards, National Hospital Insurance and other social support services offered through government initiated platforms. Computers are also part of the resources for lifelong learning from which the vulnerable youth can access business related information as well as networking and partnership platforms. Majority of the youth regardless of their social or academic level are able to operate mobile phones and engage with their peers on social platforms and vulnerable youth are not exceptions. Therefore it would not be difficult to introduce the youth trainees to the computers as source of information and training rather than for entertainment and social interactions. This is one of the methods used with SGLM to enhance information literacy, use of technology and networking skills among the vulnerable youth.

#### 4.3.8 Simulation Method

The results showed that (79.3 %) of the trainers involved in the study did not used the method. This may indicate that either the method was not known to the trainers or they were not aware of the benefits associated to its use. The findings are consistent with those of (Morton & Montgomery, (2011) that most teachers find simulations time and resource consuming and need skills and experience to organize. However simulation is associated with behavioral modification techniques and prioritizes observable behavior of the trainees. This is where a life real situation is mirrored by trainees through designed activities. This method may also involve cases where a training session is mimicked without a facilitator. When well-organized the method enhances cohesion, reduces anxiety, decision making and creativity. Simulation involves engaging the learners with some models that represent the real situation. Though the method was not used by the field trainers in Nakuru County, it was one of the techniques that were used to train the treatment group, where the trainees were able to follow simulated lessons from the internet browser on designing crafts and academic games aimed at promoting team building, leadership and coordination skills. Depending on how it is applied, simulation method would enhance the use of technology, information literacy, thinking and listening skills, self-motivation and creativity among the vulnerable youth (Morton & Montgomery, 2011). This is the reason why it was selected as one of techniques use to facilitate SGLM and important method for community and youth trainers.

#### 4.3.9 Academic Games

The results show that 26 (89.6%) out of the 29 trainers indicated not having used the method; however only three trainers used the method. This result shows that academic games are not a familiar training method among the youth trainers, which may be due to lack of skills to apply games during training. The method has tremendous benefits among youthful trainees as it helps to promote team work, ability to coordinate tasks, leadership, and time management as well as cultivate interest among the learners. The method also enhances skills in decision making and cohesion as team members' work together to compete with the other teams (Petrina, 2011). The method is good for social learning and trainers must be conversant with different games that enhance learning to be able to select appropriately. This method is time consuming and requires a level of masterly on the part of the trainer; otherwise it can be a mere physical/mental exercise and time wasting if not well applied.

From the finding on the training methods, it is evident that youth trainers in Nakuru County vulnerable youth trainers use transmissive and transactive training methods such as lecture, demonstrations and individual projects or assignments, which involve direct delivery of the content as the trainees watch, listen and take notes similar to class room teaching. These methods are good for knowledge acquisition but limit the trainees' involvement and do not yield the transformative learning required for the vulnerable youth (Tyler & Mezirow, 2011). Furthermore they are not appropriate for learners with low levels of education. Group discussion was also regularly used, where learners are able to share their individual experiences and learn from each other. When well applied group discussion fosters transfer of learning, stimulates thinking and interest as well as enhancing teamwork (Philip & Gorge, 2012). It may be difficult for the trainers to use computer supported learning due to the training environment but considering that majority of the participants had mobile phones the trainers can take advantage and introduce the youth to other informative platforms in their phones other than the social media. The results show that interactive and participative methods of training which are transformative are rarely used or not used at all yet as mentioned earlier they could contribute to social and economic transformation required for the vulnerable youth to be able to contribute to self and national development.

Methods like academic games, simulations, role play are ideal training methods for the youth as they are participative and fully captivate the learners. These methods can be used out-door or in their meeting places and could help reduce the learning barriers experienced by this

category of trainees. The aim of any form of training as an element of empowerment is to transform the trainees to take charge of their own lives and make choices that are sustainable in life. In SGLM this study intended to enhance acquisition of employability skills and raise the self-awareness and confidence which would in return motivate the vulnerable youth towards using the craft skills to improve their lives. Wilson (2013) observes that most of the youth trainers use information processing methods which emphasizes on memorization capabilities of the learner. The author further notes that youth trainers need to use methods which enhance the development of individual trainees, their emotional life and self-concept as well as behavioral modification methods which give priority to the observable behavior of the learners. SGLM methods used were interactive to not only impart the intended craft skills but also enhance the employability and lifelong learning skills in the process.

Youth training in all forms is an element of empowerment as it provides access to skills, information and resources to enhance their potentials. Instructional strategies are forms and procedures through which trainers and trainees experience their natural surrounding and social reality under certain conditions. Youth trainers should be able to select training methods guided by the nature of learners, the content and the learning environment and the expected outcomes. Well selected facilitation methods enable the trainer and trainees achieve their learning outcomes and can be strong tools for nurturing and transforming individuals. The results on the training methods used by the trainers have shown that transmissive teaching methods dominated the training process used on the youth in Nakuru County. Hence the importance of this study to support vulnerable youth training programs in Nakuru County.

## 4.5 Acquisition of Vocational Skills (Occupational and Craft Skills)

The second objective of the study sought to determine the association between SGLM and acquisition of vocational skills among the vulnerable youth and those trained through traditional methods in Nakuru County. This study has classified vocational skills into occupational skills and craft skills. To achieve this objective group members from the treatment and control were required to carry out a practical project and in the process, application of selected skills associated with occupational and craft skills were observed and rated. An observation checklist was used to collect data from the group members. The instrument sought to capture the level of acquisition of these facets of vocational skills among the trainees. The observed performance was rated in terms of poor, fair, good and very good. Categorical data was obtained and recorded and the results obtained are discussed in the following sections.

## 4.5.1 Occupational Skills

The observed competencies in occupational skill includes; preparation of work station, ability to handle tools and materials during production, ability to manage and reuse waste materials from production processes and ability to identify and mitigate risks. The study was interested in assessing the individual trainee's ability to prepare the work place appropriately by putting in place the safety measures required before starting the production process. This attribute is important as is it enhances safety of the worker and ensures clean processes and high quality products. The researcher used an observation checklist which indicated the level of observed performance from the trainee, which was rated as; poor, fair, good and very good. This observation tool was used on the treatment group trained using SGLM methods and control group trained through traditional methods. The results are as shown on Table 9.

Table 9:
Ability to Prepare Work Station

Preparation of the work station								
G	roups	Poor	Fair	Good	Very good	Total		
TD	Treatment	0	9	5	6	20		
Training	Control	28	2	1	0	31		
Total		28	11	6	6	51		

The result on table 9 shows the level of acquisition of skills in preparing the work station after training among the treatment and control the groups. In the treatment group 20 trainees participated in the observation. This represents 67% of the trainees in the treatment group who recorded fair to very good levels of acquisition of this skill taught through SGLM. Twenty eight (28) members out of the 31 (90.3%) in the control group taught using traditional method of training exhibited poor acquisition of the skill to prepare the work station during production. This indicates that a big percentage of members in the treatment group were able to acquire this facet of occupational skills than their counterparts in the control group. To test the significance of the association between acquisition of the skill and the training methods the results were subjected to a Pearson chi test and the results are as shown on table 10. The table presents the levels of acquisition for all the groups involved in the study but not proportions, hence the valid cases represents both the groups.

Table 10:

Chi-Square Test and Strength of Association in Preparation of the Work Station

	Value χ <sup>2</sup>	df	Asymp.Sig.	Phi cramer's	Approx.Sig
			(2-sided)	Value	P-Value
Pearson Chi-Square	40.639 <sup>a</sup>	3	.000	.893	.000
Likelihood Ratio	52.472	3	.000	.893	.000
Linear-by-Linear	32.125	1	.000		
Association	32.123	1	.000		
N of Valid Cases	51			51	

The calculated result of the Pearson Chi-square statistical value is 40.639 with a p-value 0.000, which is less than 0.05 significant levels as shown on Table 10. This implies that the acquisition of occupational skills among the trainees had a statistically significant association with SGLM methods of training used on the treatment group. From the result it can be observed that the Phi Cramer's value of 0.893 which indicate a positive association. The null hypothesis was rejected. To further strengthen the results and bring out difference between SGLM and traditional methods, a t-test for independent samples was done to calculate the difference between the means after transforming the categorical data into continuous data and the results are as shown on table 11.

Table 11:
Independent Samples t-test on Preparation of the Work Station

Preparation of work station	Lever test for equal varian	or ity of	T-test for equality of means						
					Sig. (2-tailed)	Mean difference	Std. error difference	95% con interval of difference	of
	F	Sig	t	df				Lower	Upper
Equal variances assumed	.458	.501	-2.202	57	.032	37586	.17071	71770	03403
Equal variances not assumed			-2.203	56.987	.032	37586	.17065	.71758	03414

The result on table 11 show that t value is -2.202 when equal variance is assumed and t is value is -2.203 when equal variance is not assumed. The p-value, sig (2- tailed) is 0.032 which is less than the significant level of 0.05 for this study. This can be interpreted to mean that there is a significant difference between SGLM methods and traditional methods in enhancing the acquisition of skills in preparation of work place before production processes. The t- test supports the fact that acquisition of the skills is strongly associated to SGLM methods of training.

Handling tools and materials is also another practical skill associated with occupational skills. To find out if the was any association between SGLM and acquisition of skills in handling tools and materials during production among the treatment and the control groups. An observation was conducted on the group by the researcher as they performed the production tasks and the results are as shown on table 12.

Table 12:
Ability to Handle Tools and Materials

	Handling tools and materials during production						
		Poor	Fair	Good	Total		
Training <sup>7</sup>	Γreatment	0	0	20	20		
Con	Control	2	14	15	31		
Γotal		2	14	35	51		

The result shows that majority (20) of those who received SGLM treatment were rated good in handling tools and materials during production. While those who were taught through traditional methods recorded different levels of acquisition; 15 trainees were good while 14 were fair and 2 were poor. This shows that all those who were assessed for this skill in the treatment group had already acquired the skills. However a Pearson chi square test was used to test the association between the method used and acquisition of skills in handling tools and materials. The results are as shown on table 13

Table 13:
Chi Square Test and Strength of Association for Handling Tools and Materials

-	Value χ <sup>2</sup>	df	Asymp.Sig.	Phi Cramer's	Approx. Sig.
			(2-sided)	Value	p-value
Pearson Chi-Square	15.041 <sup>a</sup>	2	.001	.543	.001
Likelihood Ratio	20.506	2	.000	.543	.001
Linear-by-Linear	13.097	1	.000		
Association					
N of Valid Cases	51			51	

As shown on Table 13, the calculated Pearson Chi- Square value is 15.041 with a p-value of 0.001which is less than  $\alpha$ : 0.05, significant level. This implies that the acquisition of skills in handling tools and materials during production is associated to the method of training used. From the analysis, it can be observed that there is a statistically significant association between SGLM method and acquisition of occupational skills in terms of handling tools and materials during production. The measure of the strength of association has a Phi Cramer's

value equal to 0.543 which indicates that there is a positive association; hence the null hypothesis was rejected. To further strengthen the results and bring out difference between SGLM and traditional methods, a t-test for independent samples was done to calculate the difference between the means after transforming the categorical data into continuous data and the results are as shown on table 14.

Table 14:
Independent Samples t-test on Handling Tools and Materials During Production

Handling tools and materials	Levene for equ of vari	ality	T-test for equality of means							
	F	Sig	t	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% confinterval o	f	
								Lower	Upper	
Equal variances assumed	1.218	.275	13.355	49	.000	2.14762	.16081	1.82446	2.47077	
Equal variances not assumed			13.388	43.6	.000	2.14762	.16041	1.82424	2.47100	

From table 14 the t-test results show that the t-value is equal to 13.355 when equal variance is assumed and 13.388 when equal variance is not assumed. The p- value (sig 2-tailed) is 0.000 which is less than the significant level of 0.05 for this study. This shows that there exists difference between SGLM methods and traditional methods used in training, thus associating the acquisition of the selected occupational skills to the use of SGLM.

The results of the study revealed that SGLM methods enhance acquisition of occupational skills in ability to prepare the work station and skills in handling tools and materials during production. Kumar, Mugundhan and Visagavel, (2014) observe that most of the low and uneducated workers are not aware of the importance of occupational health and safety (OHS) in the work place and therefore do not apply the skills. Ability to prepare the work station is a basic skill in occupational practices, which helps the individual ensure cleanliness and safety for self, materials, tools and equipment before commencing

production. This in return reduces risks, enhances the lifespan of tools and equipment as well as improving the quality of products. These skills also help the worker to be able to select personal protective clothing like gloves and dust coats to be used when dealing with tools and materials during production (Lourens, Huna, Ben & Mampuru, 2014). Therefore using training methods that enhance the acquisition of handling tools and materials during production builds up the occupational skills capabilities that are more important among the vulnerable youth as they may not have a chance to develop them otherwise, yet they are exposed to risky situations as they engage in their daily activities to earn a living. The skills acquired could enhance the safety and health practices among the vulnerable youth in Nakuru County. Table 15 shows the results of acquisition of skills in safety and health practices among the control and the treatment groups.

Table 15:
Safety and Health Practices in Production Work Places

Safety and health practices in production work									
	1								
		Yes	No	Total					
Tuoining	Treatment	10	20	30					
Training	Control	12	18	30					
Total		22	38	60					

From table 15 majority of the trainees in both groups did not acquire skills in safety and health practices during production. In the treatment learning groups the results indicated that 20 trainees out of 30 (66.7%) did not acquire skills on safety and health practices in production places, while 18 out of 30 (60%) in the control group did not show acquisition of safety and health practices skills during craft production. This implies that neither the treatment nor the control group acquired this facet of occupational skill. However, the number that showed acquisition of the skill in the control group was higher (12) than in the treatment group (10).

To test the significance and strength of association between the training methods and acquisition of safety and health practices skills during craft production, a Pearson chi square test was done and the results are as shown on table 16.

Table 16:
Chi Square Test and Strength of Association Safety and Health Practices in Production
Work Places

	Value χ <sup>2</sup>	df	Asymp.Sig.	Phi Cramer's	Approx. Sig.
			(2-sided)	Value	p-value
Pearson Chi-Square	.287 <sup>a</sup>	1	.592		.592
Continuity correction <sup>b</sup>	.072		.789		
Likelihood Ratio	.287	1	. 592		
Fisher's exact test				.789	.395
Linear-by-Linear	.287	1	.595		
Association	.201	1	.373		
N of Valid Cases	60				

The calculated Pearson Chi- Square value is 0.287 with a p- value of 0.592 as shown in Table 16, which is greater than 0.05 significant level. This implies that acquisition of skills in safety and health practices during production at work place was not dependent on the method of training used on the trainees. This means that there is no statistically significant association between acquisition of skills in safety and health practices and the training method, the null hypothesis was accepted. To further strengthen the results and bring out difference between SGLM and traditional methods, a t-test for independent samples was done to calculate the difference between the means after transforming the categorical data into continuous data and the results are as shown on table 17.

Table 17:
Independent Samples t-test on Safety and Health Practices During Production

Safety and health practices	Levene for equ of vari	ıality		t-test for equality of means							
	F	Sig	t	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% confinterval o	f		
								Lower	Upper		
Equal variances assumed	5.652	.021	279	49	.781	08571	.30710	70286	.53143		
Equal variances not assumed			267	36.184	.791	08571	.32080	73621	.56479		

From the analysis shown on table 17, t-value is 0.279 when equal variance is assumed and t-value is -0.267 when equal variance is not assumed. The p-value is 0.781 which is greater than the set significant level of 0.05 for this study. This implies that there is no significant difference between acquisition of skills in safety and health practices and the training methods used. The null hypothesis was therefore accepted.

The findings may be associated to the fact that application of safety and health precaution/ skills is a new practice among most informal artisan and hence the vulnerable youth did not hold it with the importance it deserved. Furthermore due to their level of education and exposure, the benefits of these skills are not explicitly manifested. This observation is consistent with adult theory of learning that adult learners will put interest into learning a content which they perceive as beneficial to their lives (University of South Africa (UNISA), 2015).

Ability to manage and reuse waste materials produced from the production processes is very important especially to a craft producer as it minimizes wastage, reduces cost and ensures a clean environment. This is also an important attribute associated with occupational skills. Table 18 shows the results on the observation done on the trainees in the treatment and control group on the level of acquisition of skills in reuse of waste materials from production processes.

Table 18:

Managing and Reuse of Waste Obtained From Production Process

	Managing and reuse of waste obtained from								
		production process							
		yes	No	Total					
Tuoinina	Treatment	10	20	30					
Training	Control	16	14	30					
Total		26	34	60					

From table 18, out of 30 members in the treatment group 20 (66.7%) members of the treatment group displayed not having acquired skills to manage and reuse of waste materials from production processes, while only 10 (33.3%) acquired the skill. In the control group 14 (46.7%) members indicated not having acquired this skill and 16 (53.3%) indicated having acquired the skill. This shows that a big number of trainees in the control group who were trained using traditional skills acquired this skill as opposed to only 10 in the treatment group who were taught using SGLM. This may imply that acquisition of this skill did not depend on the use of SGLM as a training method, but there could be other factors beyond the scope of this study that may have influenced the result.

The result were further analyzed for significance using Pearson chi square to test the association between the training method and acquisition of skills in managing and reuse of production waste a Pearson chi square was done and the results are as shown on table 19.

Table19:
Chi Square Test and Strength of Association Managing and Reuse of Waste Obtained
From Production Process

	Value χ <sup>2</sup>	df	Asymp.Sig.	Phi Cramer's	Approx. Sig.
			(2-sided)	Value	p-value
Pearson Chi-Square	2.443 <sup>a</sup>	1	.118		.118
Continuity correction	1.697		.193		
Likelihood Ratio	2.462	1	. 117		
Fisher's exact test				.192	.096
Linear-by-Linear	2.403	1	.121		
Association	2.403	1	.121		
N of Valid Cases	60				

Table 19 shows the calculated Pearson Chi- Square value is 2.443 with a p- value of 0.118 which is greater than the significant level of 0.05. This implies that there is no statistically significant association between SGLM and the null hypothesis is thus accepted. Further analyzes was done using t-test of independent samples to bring out the difference between SGLM and traditional methods used during training, methods used and the results obtained are as shown on table 20.

Table 20:
Independent Samples t-test on Managing and Reuse of Waste Obtained from Production Process

Managing and reuse of production waste	Levene for equ variance	ality of	t-test for equality of means							
	F	Sig	t	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% confinterval o	f	
								Lower	Upper	
Equal variances assumed	1.758	.191	620	49	.538	17143	.27670	72748	.38462	
Equal variances not assumed			639	47.30	.526	17143	.26817	71083	.36797	

From table 20, the analysis shows that the t-value is 0.62 when equal variance is assumed and t-value is .639 when equal variance is not assumed. The P-value is 0.538, which is greater than the significant level of 0.05 set for this study. The result can be interpreted to mean that there was no statistically significant difference between SGLM and the traditional method in acquisition of skills in managing and reuse of waste obtained from production processes.

The findings show that SGLM methods did not enhance acquisition of this facet of occupational skills in managing and reuse of waste obtained from production process. This result may also be associated to the fact that it was the first time that producing craft products using waste materials was being introduced to the vulnerable youth. This being a new concept then maybe they required more time to internalize the practice. The skill is also part of creativity and innovation and these are skills that need more time and practice to develop and practice as observed by AIACA-Traidcraft (2010)

The other facet of occupational skills whose acquisition was observed is ability to identify risk factors at the work place. This is an important facet as it contributes towards safety of machines, building and workers during production. Table 21 shows the results on the obtained from observing the performance of trainees in the treatment and control group on the level of acquisition of skills in ability to identify risk factors at the work place.

Table 21: Identify Risks Factors at the Work Place

		Identifying risks at the work place						
		Yes						
				Total				
	Treatment	23	7	30				
Training	Control	19	11	30				
Total		42	18	60				

The result in Table 21 shows that 23 (76.7%) trainees out of the 30 in the treatment group acquired the skill while 7 (23.3%) did not acquire the skills. In the control group 19 (63.3%) acquired the skills in identifying risks at the work place while 11 (36.7%) out of 30 members did not acquire the skills. The results imply that more trainees in the treatment group acquired the skill than those in the control group. To test if there is any association between the training methods and acquisition of skill in identifying risks at the work place, a Pearson chi was done and the results are as shown on table 22.

Table 22:
Chi square test and strength of Identify risks factors at the work place

	Value χ <sup>2</sup>	df	Asymp.Sig.	Phi Cramer's	Approx. Sig.
			(2-sided)	Value	p-value
Pearson Chi-Square	1.270 <sup>a</sup>	1	.260		0.26
Continuity correction <sup>b</sup>	.714		.398		
Likelihood Ratio	1.278	1	. 258		
Fisher's exact test				.399	.199
Linear-by-Linear	1.249	1	.264		
Association	1.249	1	.204		
N of Valid Cases	60				

From Table 22 it can be observed that the Pearson Chi- Square value is 1.27 with a p-value of 0.26 which is greater than  $\alpha$  0.05. This implies that there is no statistically significant association between SGLM and acquisition of skills in ability to identifying risk at the work place, thus accepting the null hypothesis. Further analyzes was done using t-test of independent samples to strengthen the results and show the show the difference between the two methods used during training and the results are as shown on table 23.

Table 23:
Independent Samples t-test on Ability to Identifying Risk at the Work Place

Identifying risk at the work place	Levene for equ variance	ality of	T-test for equality of means								
	F	Sig	t	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% confinterval o	f		
								Lower	Upper		
Equal variances assumed	.072	.789	301	49	.764	07143	.23692	54754	.40468		
Equal variances not assumed			309	49.4	.759	07143	.23151	53733	.39447		

From the analysis on table 23 t-value is -.301 when equal variance is assumed and t-value is -.309, when equal variance is not assumed. The P-value is 0.764, which is greater than the significant level of 0.05 for this study. This means that there is no statistically significant difference between SGLM, which was used on the treatment group and traditional method used on the control group in acquiring skills to identify risks at the work place.

The findings may be associated to the fact that the place where the training was taking place was a simulated workshop and the trainees could not be able to identify risks in this new environment, therefore the youth needed sometime to familiarize with the place to be able to identify risk factors in the room. This observation is consistent with Wilson (2013) that youth just like adults will learn better in a familiar environment and when the content has some reference to their day to day environment and past experiences. Ability to identify risk factor and develop mitigation measures require high level thinking and imagination, which

also relate to life exposure and experience an aspect that lacked among the vulnerable youth. However ability to acquire these skills would build on their decision making and problem solving skills. May be some other methods apart from SGLM could enhance acquisition.

## 4.5.2 Acquisition of Craft Skills

Crafts are classified as vocational skills that deal with trainees' ability to assemble or manipulate the raw materials to produce a tangible product, but may not require any formal training. The competencies required include; Ability to interprete sketches as well as verbal and written descriptions regarding the product, developing motifs and specifications for craft products as well as branding and packaging of items which is manifested through presentation of finished products. To determine the level of association between SGLM and acquisition of these skills among the groups the researcher used an observation checklist similar to the one used for occupational skills to observe application of the skills among the control and treatment groups. Trainees' ability to carry out activities associated with craft skills was rated in terms of; poor, fair, good or very good and the results are presented as follows:

# Interpreting Sketches, Verbal and Written Description when Making Crafts

The study sought to determine the level of acquisition of skills in understanding sketches and interpreting verbal, written description when making crafts. This is like a foundational skill in product development as it enables the trainee or producer to understand the form/style and shape of the product. The observed results are as shown on Table 24.

Table 24:
Ability to Interpret Verbal and Written Description When Making Crafts

		Interpretin	Interpreting sketches, verbal and written description							
		Poor	Fair	Good	Very good	Total				
	Treatment	0	1	18	1	20				
Training	g Control	3	14	14	0	31				
Total		3	15	32	1	51				

The result on Table 24 shows that 18 (90%) out of 20 trainees in the treatment group were good in interpreting sketches, verbal and written description and 1 (10%) was rated very good. While 14 (45.2%) out 31 members in the control group could interpret sketches, verbal

and written description fairly and another 14 (45.2%) showed good and 3 (9.6%) poor levels in acquisition of the skills. This means that 19 trainees in the treatment group acquired the skills though in different levels. The results imply the trainees in both groups acquired the skills though at different levels. However there were more trainees who acquired the skill in the treatment group than in the control group. The results were further tested for significance in association between SGLM and acquisition of skills in interpreting sketches, verbal and written description using Pearson chi-square. The results are as shown on table 25.

Table 25:

Chi-Square Test and Strength of Association for Interpreting Sketches, Verbal and Written Description

	Value χ <sup>2</sup>	df	Asymp.Sig.	Phi Cramer's	Approx. Sig.
			(2-sided)	Value	p-value
Pearson Chi-Square	14.048 <sup>a</sup>	3	.003	.525	.003
Likelihood Ratio	17.102	3	.001	.525	.003
Linear-by-Linear	12.552	1	.000		
Association	12.332	1	.000		
N of Valid Cases	51			51	

The calculated Pearson chi square test score is 14.048 as shown in Table 25 with a p- value of 0.003, which is less than  $\alpha$  0.05 significant level for this study. This means that acquisition of skills in interpreting sketches, verbal and written description when making crafts has a statistically significant association with the training method used. The null hypothesis was therefore rejected. Further analyzes was done using t-test for independent samples, this was to strengthen the findings and bring out the difference between the training methods used. The results are as shown on table 26.

Table 26:
Independent Samples t-test in Interpreting Sketches, Verbal and Written Description
When Making Crafts

Interpreting sketches, verbal and written description	Levene for equ of varia	ality			T-	test for equal	lity of means		
	F	Sig	t	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% confinterval o	f
								Lower	Upper
Equal variances assumed	4.752	.034	12.434	49	.000	2.6762	.21522	2.24368	3.10870
Equal variances not assumed			13.194	49	.000	2.6762	.20283	2.26858	3.08381

From the analyzed results on table 26 t-value is 12.434 when equal variance is assumed 13. 194 when equal variance is not assumed. P- value is .000 which is less than the significant level of 0.05 set for the study. This means that there is a statistically significant difference between the training method used to training the treatment group (SGLM) and the traditional method used to training the control group and acquisition of skills in interpreting sketches, verbal and written description when making crafts products among the vulnerable youth.

Acquisition of skills in interpreting sketches, verbal and written description when making crafts enables a craft designer to analyze sketches and visualize verbal descriptions from customers and translate them into and sketches and patterns for developing a tangible product. Sketching has different functions to the learner; for example, in garment making, sketching allows the collection of sensory impressions, creativity, facilitates discovery and ability to formulate solution to problems (Varmun & Hansen, 2011). The process also enables the trainee to organize, solve problems and communicate his/her ideas to others and receive feedback (Lucas, Spencer, & Claxton, 2012). The purpose of using SGLM methods in the training process was to use the process to enhance craft skills as well as some facet of

employability skills and the interpretation of the calculated result shows that this objective was achieved.

#### **Presentation of the Finished Products**

This is a facet of craft skills which refers to ability to present an aesthetically appealing craft product. The related skill involves packaging and branding and demystifying of the final product. A graphic representation of the level of acquisition among the treatment and the control groups who used different training methods is shown in Figure 5.

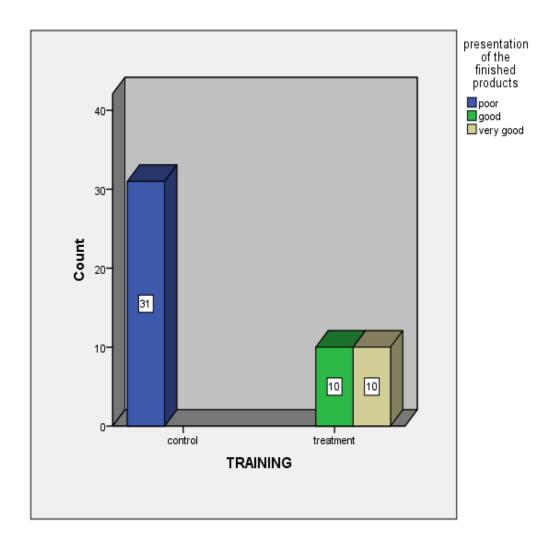


Figure 5: Presentation of the Finished Products Skills for Each Group

From Figure 5 it can be observed that all the 31 (100%) of the trainees in the control group who received training through traditional methods rated poor acquisition of skills in presentation of finished products, while 10 (50%) in the treatment group had very good acquisition and the other 10 (50%) also rated good acquisition. This result implies that SGLM

training methods enhanced the level of acquisition of skills in presentation of finished products during production than the traditional. The results were further tested for significance in association between the training method and acquisition of skills in presentation of finished products during production using Pearson chi-square. The results obtained are as shown on table 27.

Table 27:
Chi-Square Test and Strength of Association for Presentation of Finished Products

	Value $\chi^2$	df	Asymp. Sig.	Phi Cramer's	Approx. Sig
			(2-sided)	Value	P-value
Pearson Chi-Square	51.000 <sup>a</sup>	2	.000	1.000	.000
Likelihood Ratio	68.310	2	.000	1.000	.000
Linear-by-Linear	46.913	1	.000		
Association	40.913	1	.000		
N of Valid Cases	51			51	

The calculated Pearson chi- square test result obtained is equal to 51.000 with a p- Value of 0.000 as shown in Table 27 which is less than  $\alpha$  0.05 level of significant. The Phi, Cramer's V is equal to 1.000 with a P value of 0.000 which implies that the method of skill training and the presentation of finished product have a strong association. This result shows that the acquisition of skills in presentation of finished products has a statistically significant association with the method of training thus the null hypothesis was rejected. Further analyzes was done using t-test of independent samples to support the results on association and bring out the difference between SGLM and traditional training methods the results are as shown on table 28.

Table 28:
Independent Samples t-test on Skills in Presentation of Finished Product

Presentation of finished the products	Levene for equ of vari	ality			T-t	est for equali	ty of means		
	F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std. error difference	95% consinterval of difference	of
								Lower	Upper
Equal variances assumed	35.20	.000	14.193	49	.000	2.87143	.20232	2.4649	3.2780
Equal variances not assumed			16.386	37.78	.000	2.87143	.17523	2.5166	3.2262

From table 28 t-value is 14.193 when equal variance is assumed and t-value is 16.386 when equal variance is not assumed. The P-value = 0.000 which is less than the 0.05 level of significant. This gives sufficient evidence to show that there is a statistically significant difference between SGLM methods and traditional methods in enhancing acquisition of skills in presentation of finished products among the vulnerable youth.

Presentation of the finished product is an important skill to craft designers as it enhances the visual or aesthetic quality of the product, which is an attribute that contributes towards marketing of the product. Acquisition of the skills was manifested through use of sound construction processes, branding and packaging of the product as well as to label the product to demystify it. The treatment group who were trained through SGLM acquired skills due to use of simulations and academic games—that helped develop their creativity and innovation as well as giving identification marks to different teams during games. These are important attribute in branding, packaging and labeling of products.

As noted by Niedderer and Townsend (2015), craft products are mainly produced from indigenous raw materials using rudimental tools and as a result provides an easier way of empowering socially disadvantaged groups and the women. The final presentation of the product through branding and packaging is important to attract customers making acquisition of these skills critical. The desire to improve the look of a product also enhances the youth innovativeness as they look for materials to use on making wrappers and packets within their

environment to attractive potential customers. According to Blair & Elizabeth (2012), the skills help the youth appreciate beauty and appreciate other people's contribution to the product an attribute that this study sought to promote through SGLM.

According to Varmun and Hansen (2011), craft making provides an alternative and effective way of developing personal skills critical for behavioral change. Craft production process requires self-discipline and planning which apparently builds on self-efficacy. The final product results to captivation and pleasure from the immediate and direct aesthetic appearance. This experience provides the trainees with a broader way of seeing and experiencing the world, which is believed to impact on a person's ability to sense and understand issues (McCarthy et al, 2006). The intrinsic benefit may spill over to developing empathetic and sound judgment. The modern society requires youth who are creative, problem solvers, independent thinkers and accommodate other people's views, an attribute this study sought to enhance through SGLM.

## 4.5.3 Acquisition of Employability Skills

The third objective of the study sought to determine the association between SGLM and acquisition of employability skills among the vulnerable youth and those taught using traditional methods. Employability skills are also referred to as transferable skills in this study. The selected facets of the skills were categorized into two; Interpersonal skills associated with; communication & listening skills and team work. The other category is problem solving skill which are associated with; Creativity and innovation, planning and organization and self - motivation.

An observation checklist was used to collect data from the treatment and control group as they performed their group task and the results recorded. The instrument sought for observed performance related to the selected facets of employability skills. The skills level of acquisition was recorded as poor, fair, good or very good and the obtained results are as reported in the following sections. Table 29 shows the results obtained from trainees on their ability to communicate listen and respond to questions.

Table 29:
Ability to Communicate, Listen and Respond to Questions

		Communic	cating, listenii	ng and respon	nding to questions	
		Poor	Fair	Good	Very good	Total
	Treatment	0	1	10	9	20
Training	Control	3	18	10	0	31
	Total	3	19	20	9	51

The results in table 29 shows that 19 (95%) out of the 20 trainees from the treatment group were rated as having acquired the skills in ability to communicate, listen and respond to questions though in different levels. While 18 (58.1%) of the trainees in the control group were rated fair and 10 (32.3%) good out of the 31 trainees who participated. Majority (95%) in the treatment group acquired this facet of employability skill. The results can be interpreted to mean that there was a higher level of acquisition of skills in communicating, listening and responding to questions among the trainees in the treatment than in the control group. To testis there was statistically significant the association between the training method and the level of acquisition of skills in communicating, listening and responding to question a Pearson chi test was done and the results are as shown on table 30.

Table 30:
Chi-Square Tests and Strength of Association for Skills in Communicating Listening and Responding to Question

	Value χ <sup>2</sup>	df	Asymp. Sig.	Phi cramer's	Approx. Sig.
			(2-sided)	v-value	P-value
Pearson Chi-Square	26.050 <sup>a</sup>	3	.000	.715	.000
Likelihood Ratio	32.749	3	.000	.715	.000
Linear-by-Linear	23.958	1	.000		
Association	23.936	1	.000		
N of Valid Cases	51			51	

Table 30 shows the calculated results of Pearson Chi test.  $\chi^2$  value of 26.050 was obtained and a p-vale of 0.000 which is less than .05 level of significant for the study. This implies that there is a statistically significant association between the training method and acquisition of skills in communicating; listening and responding to questions. Thus the null hypothesis was rejected. To support the results obtained for association and show the

difference between the two training methods, a t- test for independent samples was done and the results are as shown on table 31.

Table 31: Independent Samples t-test on Skills in Communicating Listening and Responding to Question

Skills in communicating listening and responding to questions	Leve test for equalit variance	y of			T-	test for equal	ity of means		
	F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std. error difference	95% confinterval o	f
								Lower	Upper
Equal variances assumed	3.849	.055	6.58	49	.000	2.51429	.38220	1.7462	3.282
Equal variances not assumed			7.04	49	.000	2.51429	.35698	1.7969	3.232

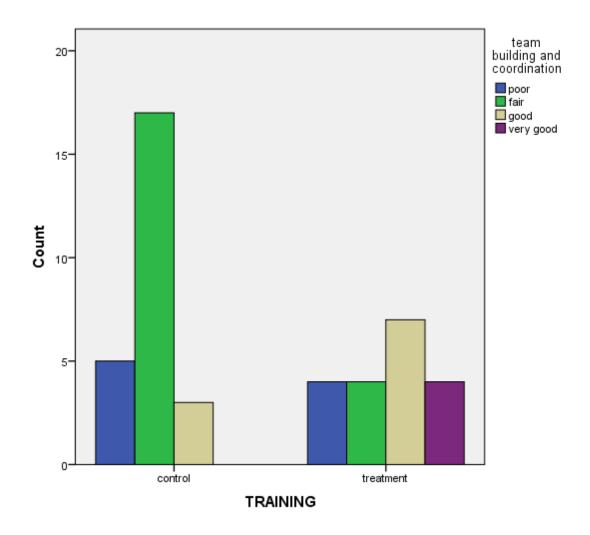
From table 31 the analysis show that the t-value = 6.58 when equal variance is assumed and t-value and equal to 7.043 when equal variance is not assumed. The P- value is 0.000 which was less than 0.05 level of significant. This implies that there is a statistically significant difference between the SGLM methods that were used on the treatment group and the traditional methods of training used on the control group in acquiring skills in communicating, listening and responding to questions among the youth.

The results are consistent with the World Bank report (2015 that facilitative training methods could develop employability skills among the youth. However, Jongetal (2006) observes that traditional methods enhance listening skills, but not communication and responding to questions as the learner is passive during the learning process but mostly engaged listening and taking notes. These skills are important to people involved in crafts and creative art businesses as most of the customers place their orders through verbal descriptions, which require the designer to have good listening and responding skills, as well as asking questions for clarification of details. The skills are also useful as they assist the

craft designer with ability to engage the customer in a conversation to get the visual image of what the customer need. Ability to communicate well is also important in marketing especially for group members engaged hawking business as often time they find customers who give them orders for specific products. Lack of the ability to listen and communicate with customers may lead to poor sales or even loose of customers and business.

## 4.5.3.1 Ability in Team Building and Coordination

Ability to build teams is also a facet of employability skills and is manifested through one's ability to participate and contribute to team work, while coordination is the ability to organize tasks such as group tasks and individual contribution to production processes effectively. These are important traits among the vulnerable youth in this study as they contribute towards group unity and cohesion. The observed level of acquisition on these facets was rated as poor, fair, good and very good based on the performance during group tasks. The results are graphically presented on Figure 6.



## Figure 6: Ability in Team Building and Coordination

Figure 6 shows the levels of acquisition of skills in team building and coordination. In the treatment group 4 (21.1%) trainees rated very good and 7 (36.9%) were rated good levels of acquisition of these skills. In the control group 4 (21.05%) trainees rated fair and another 4 (21.05%) rated poor out of the 19 trainees. In the control group, 18 (69.2%) trainees were rated to have fair level of acquisition, 3 (11.5%) good, while 5 (19.3%) were rated to have poor acquisition of skills team building and coordination. These results can be interpreted to mean that both the treatment and the control groups acquired the skills but at different levels. However 11(57.9%) trainees in the treatment groups rated good and very good acquisition. While in the control 18 (69.2 %) rated fair levels of acquisition of this skill. To test if there was a statistically significant association between the training method and acquisition of this facet of the skill, a Pearson chi square test was done and the results are as shown on table 32.

Table 32: Chi-Square Tests and Strength of Association for Team Building and Coordination

	Value $\chi^2$	df	Asymp.Sig.	P-cramer's	Approx.Sig.
			(2-sided)	v- Value	P- Value
Pearson Chi-Square	13.867 <sup>a</sup>	3	.003		.003
Likelihood Ratio	15.845	3	.001		.001
Linear-by-Linear	6.250	1	012		012
Association	6.258	1	.012		.012
N of Valid Cases	45				

Table 32 shows the calculated test of association, Chi square test result is 13.867 with a p- value of 0.003 which is less than  $\alpha$  0.05 levels. The result shows that there is a statistically significant association between the training method and acquisition of skills in team building and coordination. The null hypothesis was rejected. To support the results on association and establish if there was a difference between the two methods, a t-test for independent samples was done to test if there was any significant difference between SGLM and the traditional methods and the results are as shown on table 33.

Table 33:
Independent Samples t-test on Skills in Team Building and Coordination

Skills in team building and coordination	Levene for equ variance	ality of			T-te	est for equality	y of means		
	F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std. error difference	95% con interval of difference	of
								Lower	Upper
Equal variances assumed	.154	.696	4.885	49	.000	1.20952	.24759	.7120	1.707
Equal variances not assumed			4.982	45.96	.000	1.20952	.24280	.7208	1.698

Table 33, it can be observed that the t-value is 4.885 when equal variance is assumed and the value is 4.982 when equal variance is not assumed. The P- value = 0.000 which was less than 0.05 significant level. This means that there is a statistically significant difference between the SGLM training method used on the treatment group and the traditional method of training used on the control group during training.

Team building and coordination are important facets of employability skills and are crucial in enhancing unity, cohesion, leadership and ability to make positive decisions concerning one's life (Jin, 2014). The skills are important to the vulnerable youth in helping them work together and manage their scarce resources for sustainability. Working in teams may help them value each other as a resource but not a threat, and by so doing change their attitude towards life and humanity. The skills are important in enhancing group cohesion which determines the sustainability of the members, especially to be able to access government support and services which are offered to various groups, hence the importance of this skill in this study.

#### **4.5.3.2 Developing Practical Solutions to Production Problems**

This is an attribute in employability skills which is very important as it determine the sustainability of their business related activities. Trainees performance was rated during group task and the results are as shown on table 34

Table 34:
Ability to Develop Practical Solutions to Production Problems

	Γ	Developing	practical solu	tions to produ	ction problems	•
		Poor	Fair	Good	Very Good	Total
Training	Treatment	0	6	10	3	19
	Control	11	20	0	0	31
Total		11	26	10	3	50

Table 34 shows the observed performance on trainees' ability to develop practical solutions to problems during production. The results indicate that in the treatment group 6 (31.58%) rated fair in acquisition, 10 (52.63%) rated good and 3 (15.79%) rated very good. While in the control group 20 (64.5%) rated fair acquisition of this employability skill and 11(35.5%) rated poor. This means that those trainees in the treatment group trained using SGLM methods, majority were able to acquire the skill but at different levels. However in the control group that used traditional methods of training 64.5% acquired the skill fairly and 35.5% were rated to have poor acquisition. A Pearson chi square test was done to determine if there was a statistically significant association between the training method and skill acquisition. The results are as shown on table 35.

Table 35:
Chi-Square Tests and Strength of Association for Ability to Develop Practical Solutions to Production Problems

	Value χ <sup>2</sup>	df	Asymp. Sig.	Phi cramer's	Approx. Sig.
			(2-sided)	v-value	P-value
Pearson Chi-Square	30.410 <sup>a</sup>	3	.000	.780	.000
Likelihood Ratio	38.316	3	.000	.780	.000
Linear-by-Linear	25.445	1	.000		
Association	23.443	1	.000		
N of Valid Cases	50			50	

The calculated Chi square test result is equal to 30.41 as shown in table 35 with a p-value of  $0.000 \le 0.05$  significant level, which shows that there is a statistically significant association between the training method and acquisition of practical skills to solving problems. The null hypothesis was rejected. To support the results on association and

establish if there was a difference between the two methods, a t-test for independent samples was done and the results are as shown on table 36.

Table 36: Independent Samples t-test on Ability to Develop Practical Solutions to Production Problems

Develop practical solutions to production problems	Levene for equa variance	ality of				T-test for e	equality of m	eans	
	F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std. error difference	95% con interval odifference	of
								Lower	Upper
Equal variances assumed	19.06	.000	16.65	49	.000	3.13333	.18832	2.755	3.512
Equal variances not assumed			14.74	25.61	.000	3.13333	.21260	2.696	3.571

From table 36 it can be observed that the t-value is 16.638 when equal variance is assumed and the same value is 14.738 when equal variance is not assumed. The P- value = 0.000 which was less than 0.05 level of significant. This means that there is a statistically significant difference between the SGLM training method (treatment) and the traditional method of training (control) in acquiring skill for developing practical solution to production problems

This finding is consistent with Darryn, Gekara and Gatt, (2016) who observes that group learning enables the youth have a level of independence and initiative in solving problems with in the group or work related. Such youth are able to apply a range of strategies or approaches to solve problems which may include addressing customer complaints related to products, sorting out problems related to tools and equipment. This characteristic could benefit the vulnerable youth making them innovate solutions to some of their life situations.

This facet of employability skills was acquired during the training in making craft products as well as during the group project where they were expected to apply their creativity and innovation to develop solutions related to materials and procedures. The finding is also supported by Schwarz and Yair (2010) who observe that training in craft skills in non-formal set up also enhances ability to solve problems, risk-taking and identifying opportunities as well as entrepreneurial characteristics such as creativity and innovation.

# 4.5.3.3 Ability to Manage Time and Resources During Production

This is also a facet of employability skills that the trainees needed to acquire. The observed performance was rated as poor, fair, good and very good. Data obtained from the observation check list was analyzed and the results are as shown on table 37.

Table 37:
Time and Resource and Management during Production

	,	Time and	resources	managemen	t during production	on
		Poor	Fair	Good	Very good	Total
Training	Treatment	0	3	15	1	19
Training	Control	8	21	2	0	31
Total		8	24	17	1	50

The results on table 37 shows that 19 trainees in the treatment group acquired the skill at different levels, 3 (15.8%) rated fair, 15 (78.9%) good and 1 (5.3%) very good. Trainees who were in the control group were rated as 21(67.7%) fair, 2 (6.5%) good and 8 (25.8%) poor in acquisition of skills to manage time and resources during production. The results implies that the trainees who used SGLM methods showed enhanced acquisition of skills in ability to manage time and resources during production than those in the control group who used traditional methods. To determine if there was a statistical significant association between the training methods and acquisition of skills in ability to manage time and resources during production a Pearson chi square test was done and the results are shown on table 38.

Table 38:
Chi-Square Tests and Strength of Association for Time and Resource and Management
During Production

	Value χ <sup>2</sup>	df	Asymp. Sig.	Phi cramer's	Approx. Sig.
			(2-sided)	v-value	P-value
Pearson Chi-Square	31.368 <sup>a</sup>	3	.000	.792	.000
Likelihood Ratio	36.006	3	.000	.792	.000
Linear-by-Linear	25.720	1	.000		
Association	23.720	1	.000		
N of Valid Cases	50			50	

Table 38 shows the calculated Pearson Chi square test result is equal to 31.368 with a Phi, Cramer's value of 0.792. P- value of 0.000 which is less than 0.05 significant level set for the study. This result shows that there is a statistically significant association between acquisition of skills in time and resources management during production and the training method used on the treatment group (SGLM). Thus the null hypothesis was rejected. To support the findings and establish if there was a difference between the two methods, a t-test for independent samples was done and the results are as shown on table 39.

Table 39:
Independent Samples t-test on Ability to Manage Time and Resources During
Production

Ability to manage timeand resources during production	Lev test : equal variar	ity of			T-test f	or equality of	`means		
	F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std. error difference	95% con interval differen	
								Lower	Upper
Equal variances assumed	.212	.647	6.578	49	.000	1.84762	.28088	1.283	2.412
Equal variances not assumed			6.641	44.61	.000	1.84762	.27822	1.287	2.408

From the analysis on table 39 the t-value is 6.578 when equal variance is assumed and the same value is 6.641 when equal variance is not assumed. The P- value = 0.000 which was less than 0.05 level of significance. This means that there is a statistically significant difference between SGLM training methods used on the treatment group and the traditional methods used on the control in acquiring skills for time and resources management during production.

The findings are consistent with Zurcher, 2014; UNESCO, 2012; Raymond and Romanczyk (2008) who observes that interactive and participative methods of learning could develop learners' ability to manage time and resources and also contribute to individual's effectiveness and accountability in different ventures. According to National Quality Council (2010) these skills can be manifested in different forms such as ability to manage resources, allocate time, money, materials, space, and staff, working with others. The vulnerable youth intend to start small businesses to improve their lives; hence the ability to manage time and meet deadlines is very important in building trust and business relationship with customers. The skills are therefore of great importance among the youth and should be enhanced.

## 4.5.3.4 Ability to Develop Self Confidence in Expression

This is also an important attribute in employability skills as it helps to build the self-concept necessary for the vulnerable youth. An observation checklist was used to assess acquisition of this facet of employability skills among the trainees and the level was rated as poor, fair, good and very good. The results are as are as shown on table 40.

Table 40:
Developing Self Confidence in Expression

Developed confidence in expressing self										
		Poor	Fair	Good	Very good	Total				
Tuoining	Treatment	0	11	8	1	20				
Training	Control	2	19	7	3	31				
Total		2	30	15	4	51				

The results on table 40 show that in the treatment group, the trainees level of skill acquisition rated was; 11 (55%) fair, 8 (40%) good and 1 (5%) very good. While in the control group, 19 (61.3%) were rated fair, 7 (22.6%) good and 3 (9.7%) very good and only 2 (6.5%) were rated poor. The result implies that though all the 20 trainees from the treatment group acquired skills in developing confidence and expressing self but in different levels, there was a higher level of acquisition of this skill among the control group that was taught using traditional methods. To determine if there was a statistically significant association between the training methods and acquisition of skills in developing confidence and expressing self a Pearson chi square test was done and the results are as shown on table 41

Table 41: Chi-Square Tests and Strength of Association for Developing Self Confidence in Expression

	Value $\chi^2$	df	Asymp. Sig.	Phi cramer's	Approx. Sig.
			(2-sided)	v-value	P-value
Pearson Chi-Square	2.965 <sup>a</sup>	3	.397	.241	.397
Likelihood Ratio	3.654	3	.301	.241	.397
Linear-by-Linear	.526	1	.468		
Association	.320	1	.400		
N of Valid Cases	51			51	

The calculated Pearson Chi-square test results shown on table 41 indicate that the p-value  $.397 \ge 0.05$  level of significant set for the study. This implies that there is no statistically significant association between SGLM and acquisition of skills in developing self-confidence and expression. Thus the null hypothesis is accepted. To support the findings and establish if there was a difference between the two methods, a t-test for independent samples was done and the results are as shown on table 42

Table 42:
Independent Samples t-test on Ability to Develop Confidence and Self -Expression

Developing confidence and expressing self		e's test nality of ces	T-test for equality of means							
	F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std. error difference	95% con interval of difference	of	
								Lower	Upper	
Equal variances assumed	.491	.487	325	46	.747	07857	.24191	5655	.4084	
Equal variances not assumed			334	44.56	.740	07857	.23527	5525	.3954	

From the analysis on table 42, it can be observed that the t-value is -0.325 when equal variance is assumed and is equal to -0.334 when equal variance is not assumed. The P- value = 0.747 which was greater than 0.05 level of significant. This means that there is no statistically significant difference between the SGLM training method used on the treatment group and the traditional method of training used in the control group in acquiring skills for developing confidence in expressing self in enhancing acquisition of this skill.

The result implies that the trainees in the control group were able to acquire the skills than the treatment group. This could have been influenced by the fact that all the groups wre trained in production of craft products, which they were able to come up with tangible products at the end of the training. The acquisition could be associated with the appreciation and compliments that the members received after completing and displaying the handicrafts.

The interpretation is consistent with Lucas (2014) who observed that learning craft skills develop self-esteem and confidence in a trainee after producing a craft item, which is an accomplishment that is normally complimented by those who view the product and this raises the individual's confidence and self- esteem. This means that the development of this skill is not related to training but to the ability to produce a tangible product. This occurrence may be associated to the fact that both the control and the treatment groups produced and displayed craft products which were viewed and critiqued by all the viewers. The compliments and appreciation of the product may have improved the self- worth which in return enhances confidence in self-expression.

It is also important to consider that the type of social background the vulnerable youth came from greatly eroded their self-worth over time, which in return affected their personality, confidence and self-expression. It may therefore require much more than just a training method to enhance the level of self-confidence and ability to express self. This is consistent with Morton (2011) and Kelly (2003) who observed that to adequately improve the self-concept of the vulnerable youth a psychological approach is also required together with interactive training methods.

The explanation of the results may also concur with the European Commission report (2013), that some facets of employability skills are much more indescribable and difficult to quantify and to formally develop; they also relate to issues of creativity, self-initiative and self-control. However it is observed that every person possesses some degree of employability skills but lacks awareness, understanding and ability to apply the skills to different life situations (Kim, 2013; Weeden, 2011). From the preceding results and discussion, it is evident that not all facets of employability skills can be enhanced through SGLM methods, but there may be other factors that enhance acquisition but beyond the scope of this study.

## 4.6 Acquisition of Lifelong Learning Skills

The fourth objective of the study sought to determine the association between SGLM and acquisition of lifelong learning skills among the vulnerable youth and those taught using traditional methods. The selected skills in lifelong learning include; Desire to learn other skills and information literacy, networking, partnership and use of technology. An observation checklist was used to collect data from both the treatment and the control group.

The observed level of performance in the selected facets of lifelong learning skills was rated as: poor, fair, good and very good. The results obtained for skills on the desire to learn have been presented on table 43.

## 4.6.1 Desire to Learn Other Skills and Information Literacy

This is an attribute of lifelong learning and provides the trainee with the desire to know more especially skills that will contribute to self-development or support their daily life engagements, as well as ability to look for important information from different sources. The results on the level of acquisition for the treatment and control groups are as shown on table 43.

Table 43:

Desire to Learn Other Skills and Information Literacy

	Desire to learn other skills that would enhance craft								
	production								
		Poor	Fair	Good	very good	Total			
Training	Treatment	0	7	8	5	20			
Co	Control	1	15	11	1	28			
Total		1	22	19	6	48			

The result on table 43 shows that out of the trainees in the treatment group who were rated; 7 (35%) rated fair, 8 (40%) good and 5 (25%) very good, meaning 20 from the treatment group that used SGLM methods manifested different levels of acquisition of the skills. In the control group the observed results showed that; 15 (53.5 %) rated fair, 11 (39.3%) good and 1(3.6%) very good and another 1(3.6%) rated poor. This means that 27 trainees in the control group manifested different levels of acquisition of the desire to learn and information literacy skills as an attribute of lifelong learning skills. To determine if there was a statistically significant association between the training method and acquisition of skills in the desire to learn and information literacy among the trainees a Pearson chi square test was done and the results are as shown on table 44.

Table 44:
Chi-Square Tests and Strength of Association for Desire to Learn Other Skills

	Value χ <sup>2</sup>	df	Asymp. Sig.	Phi cramer's	Approx. Sig.
			(2-sided)	v-value	P-value
Pearson Chi-Square	5.879 <sup>a</sup>	3	.118	.350	.118
Likelihood Ratio	6.410	3	.093	.350	.118
Linear-by-Linear	4.826	1	.028		
Association	4.820	1	.028		
N of Valid Cases	48			48	

The calculated chi-square results as shown in Table 44 indicates a p-value of .118  $\geq$  0.05 level of significant, which implies that there is no statistically significant association in acquisition of the desire to learn skills and the method of training. Thus the null hypothesis has been accepted. To support the findings and establish if there was a difference between the two methods, a t-test for independent samples was done and the results are as shown on table 45.

Table 45:
Independent Samples t-test on Desire to Learn Other Skills

Desire to learn other skills	Levene's test T-test for equality of means for equality of variances								
	F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std. error difference	95% con interval difference	of
								Lower	Upper
Equal variances assumed	2.015	.162	1.889	48	.065	.47783	.25292	0307	.9864
Equal variances not assumed			1.943	46.83	.058	.47783	.24598	0171	.9727

From the t-test results shown on table 45, t-value is 1.889 when equal variance is assumed and is 1.943 when equal variance is not assumed. The P- value is 0.0.065 which was greater than 0.05 level of significant. This means that there is no statistically significant difference between the SGLM training method used on the treatment group and the traditional method of training used on the control group in acquiring skills in desire to learn other skills and information literacy.

The result indicates that the acquisition of this facet of lifelong learning skills is not dependent on the training method used. This result may be explained by UNICEF, (2011) and United Nations, (2006) observation that some lifelong learning skills are high order skills and borrows heavily from prior learning and past experiences. Therefore, the results may be attributed to the level of life experience and exposure among the youth as well as negative past experiences in educational programs and inability to see the relevance of the skill to their daily lives, thus causing a learning barrier. Youth are normally a curious lot, and this was the first time that craft skills were being introduced to them. Supported learning was highly used during training to inculcate this skill; this may have caused excitement on the trainees as first time experience, hence affecting the expected result. The experience in acquiring these skills require some exposure or ability to grasp concept which is contrary to the common belief that vocational skills' training does not require any level of education or cognitive ability, it is acknowledged that a persons' level of education affects their level of personal development, productivity and adaptability to different circumstances. May be the enhancement of this skills could have been affected by other factors other than the training method such as the learning environment and the resources available.

## 4.6.2. Ability to Network with Other Players

The study was also interested in enhancing acquisition of networking skills among the vulnerable youth as a lifelong learning skill. The data was collected using an observation checklist. And the results recorded are as presented on figure 7.

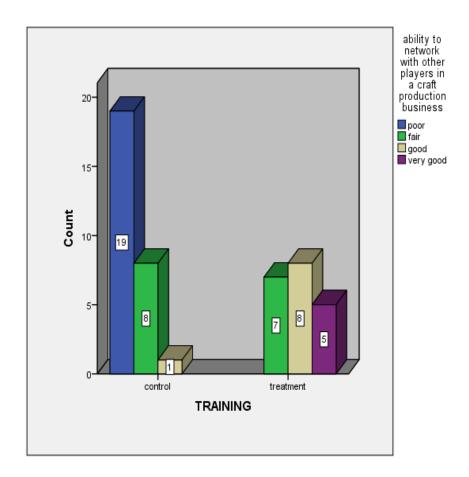


Figure 7: Ability to Network with Other Players in the Craft Industry

From Figure 7, it can be observed that 7 (35%) trainees in the treatment group were rated fair, 8 (40%) good and 5 (25%) very good in the acquisition of this facet of lifelong learning. While in the control group, 19 (67.9%) were rated poor, 8 (28.6%) rated fair and 1 (3.6%) good in acquisition of skills in ability to network with other players in craft production. This implies that all (100%) of the trainees in the treatment group acquired the skills at different levels, while majority 67.9% in the control group did not acquire the skill. To determine if there was a statistically significant association between the training methods and acquisition of skills in the ability to network with other payers in the craft industry, a chi square test was carried out and the results are as shown on table 46.

Table 46:
Chi Square Test Results and Strength of Association for Ability to Network with Other Players in Craft Industry

	Value χ <sup>2</sup>	df	Asymp. Sig.	Phi cramer's	Approx. Sig.
			(2-sided)	v-value	P-value
Pearson Chi-Square	28.983 <sup>a</sup>	3	.000	.777	.000
Likelihood Ratio	38.196	3	.000	.777	.000
Linear-by-Linear Association	27.193	1	.000		
N of Valid Cases	48			48	

Table 46 shows the result of Pearson Chi square test value  $\chi 2$  as equal to 28.983 with a p- value of  $0.000 \le 0.05$  level of significant. This shows there is a statistically significant association between the training method and acquisition of skills in ability to network with others. The null hypothesis was rejected. To support the findings and establish if there was a difference between the two training methods, a t-test for independent samples was done and the results are as shown on table 47.

Table 47:
Independent Samples t-test on Ability to Network With Other Players in Craft
Industry

Ability to network with other players in craft industry	Levene for equa variance	ality of	T-test for equality of means							
	F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std. error difference	95% con interval differen		
								Lower	Upper	
Equal variances assumed	4.409	.041	2.724	48	.009	.64696	.23752	.1694	1.124	
Equal variances not assumed			2.840	47.78	.007	.64696	.22780	.1889	1.105	

From table 47 it can be observed that the t- value is 2.724 when equal variance is assumed and is 2.840 when equal variance is not assumed. The P- value = 0.009 which was less than 0.05 level of significant. This means that there is a statistical significant difference between the SGLM training method used on the treatment group and the traditional method of training used on the control in acquiring skill for ability to network with other players in craft industry.

The results imply that the method of training used on the treatment group and the ability to network with other players in craft production has a strong association and that acquisition of skills in ability to network with other players significantly depended on the method of training used. The results reveals that SGLM methods especially simulations and internet access through computer support, which were used during training contributed towards enhancing the ability to network with other players by using social plat forms to access related information on organizations and groups.

The findings concurs with Stella (2012) that lifelong learning if deployed effectively opens up the individuals thought life, resulting to emancipation and empowerment of

individuals, organizations and communities involved. This attribute is what leads to individuals' desire to network and partner with others. The skill opens the outside world through online connections and social plat forms to exchange ideas and skills. This in return provides opportunities for new designs, broader market ideas and increased profits for craft designers. The vulnerable youth may not only apply this skill on craft production but also to address other circumstances in their lives.

## 4.6.3. Recognition of the Importance of Technology

Ability to appreciate the importance of technology in craft production was also among the selected skills in lifelong learning. An observation checklist was used to collect data by rating the observed performance on the application of this skill. The level of acquisition of this skill among the two groups was rated as; poor, fair, good and very good and the results are as shown on table 48

Table 48:

Recognition of the Importance of Technology

	Recognition of the importance of the technology in									
	craft business									
		Poor	Fair	Good	Very good	Total				
Training	Treatment	0	0	13	7	20				
	Control	27	1	0	0	28				
Total		27	1	13	7	48				

Table 48 shows that out of the 20 trainees in the treatment group whose application of this skill was observed 13 (65%) were rated good and 7 (35%) rated very good. While in the control group 1(3.6%) was rated fair and 27(96.4 %) were rated poor out of the 28 trainees who were observed in the acquisition of skills in the ability to recognize the importance of technology in craft production. The result indicate that all the trainees in the treatment group demonstrated acquisition of skills in recognizing the importance of technology in craft business, while only 1 trainee in the control group acquired the skills. To determine if there was any statistically significant association between the training methods and acquisition of skills in recognizing the importance of technology in craft business, a chi square test was done on the results as shown on table 49.

Table 49:
Chi Square Test Results and Strength of Association for Recognition of the Importance of the Technology

	Value χ <sup>2</sup>	df	Asymp. Sig.	Phi cramer's	Approx. Sig.
			(2-sided)	v-value	P-value
Pearson Chi-Square	48.000 <sup>a</sup>	3	.000	1.000	.000
Likelihood Ratio	65.203	3	.000	1.000	.000
Linear-by-Linear	43.189	1	.000		
Association	43.109	1	.000		
N of Valid Cases	48				

Table 49 shows the calculated results of the Pearson Chi square test value  $\chi^2$  is 48.000. The calculated Phi, Cramer's value is 1.000. The P- value is 0.000, which is less than 0.05 significant level. This means that there is a statistically significant association between the training method and ability to recognize the importance of technology in craft business. The null hypothesis has been rejected. To support the findings and establish if there was a difference between the two training methods, a t-test for independent samples was done and the results are as shown on table 50.

Table 50: Independent Samples t-test on Ability to Recognition of the Importance of the Technology

Recognition of the importance of the technology	Levene for equ varianc	ality of	T-test for equality of means						
	F	Sig	t	df	Sig. (2-tailed)	Mean Difference	Std. error difference	95% con interval differen	
								Lower	Upper
Equal variances assumed	3.089	.085	-16.04	49	.000	-3.03333	.18905	3.413	-2.653
Equal variances not assumed			-16.68	47.98	.000	-3.03333	.18187	3.399	-2.668

From table 50 it can be observed that the t-value is -16.045 when equal variance is assumed and t-value is -16.679 when equal variance is not assumed. The P- value = 0.000 which was less than 0.05 significant level. This means that there is a statistically significant difference between the SGLM training method used on the treatment group and the traditional method of training used on the control group in acquiring skill for recognition of the importance of the technology in craft business. The results indicate that acquisition of skills in ability to recognize the importance of technology in craft production depended on the training method used.

The finding is consistent with Sweet and Michaelsen, (2008) observation that the youth will take interest in any captivating and exploratory skill. This result could also be associated with the fact that the trainees were able to recognize and alternative and more beneficial use of their mobile phone and computers. Like adults the youth will embrace a skill only when they foresee benefits, to address a life problem or to serve their interest. The approach used to facilitate the skill was through computer supported learning, which was exciting and engaging to the vulnerable youth. The youth could easily associate the skills to

basic information technology skills, designing, advertising and marketing of craft products. This may further explain the high levels of skills acquisition among the treatment group.

The selected four central elements of lifelong learning were more appropriate to the vulnerable youth groups namely; Learning skills and information literacy, networking and partnership and recognition of the importance of the technology are critical skills, which could help the vulnerable youth achieve economic progress, personal development, and fulfillment as well as an understanding of democratic policies which are necessary for their participation and inclusion in the society (Marjan & Ashkan 2012).

Ability to recognize the importance of technology in craft business could encourage the vulnerable youth to use mobile phone for business engagements other than social media and entertainment. The skill also enables them to embrace modern technology in production which in return will reduce time taken to produce an item, improve the quality of the product, ensure consistency as well as improve customer's satisfaction.

Williams (2009) observes that learning comes naturally, especially when a participant is provided with the appropriate stimulus and that lifelong learning as a key requirement for all. Hence the vulnerable youth should were given a stimulating experience as they learn for them to develop their lifelong learning skills. Enhancing lifelong learning skills triggers passion and curiosity within the youth, an attribute that impacts positively toward the individuals and their engagements. Kim (2013) notes that every individual is responsible for his own development especially skills upgrading, in as much as this skill is mostly used to benefit the employer the individual learner stands to gain much more.

Lifelong learning as explained by Dalma, Zeng and Wangs (2007) is not merely a mechanism for adapting the individual to technological and socio-economic changes, but a vehicle for transforming society and enabling a person to direct and control the course of change in their lives instead of reacting to it. According to Stella (2012) without lifelong learning, those not in schools would become isolated or marginalized from global activities participation. Lifelong learning if deployed effectively results to emancipation and empowerment of individuals, organizations and communities involved. The flexibility and impact resulting from lifelong learning makes it more crucial to the vulnerable youth than to anybody else.

## 4.7 Challenges Encountered while Training Vulnerable Youth in Nakuru County

The fifth objective sought to establish the challenges encountered while using SGLM to train the vulnerable youth in Nakuru County. A questionnaire was used to seek responses to answer the research question; what were the challenges encountered by trainers when using SGLM to train the vulnerable youth with selected skills in Nakuru County. The results have been presented through descriptive statistics; frequency tables to represent responses to the items in (QCS 3) which was administered to the treatment group after the training (*see app. 5*). This information is important as it prepares the trainers on what to expect so that they can plan on mitigation measure. These challenges have been discussed as; Absenteeism, lack of passion and self-motivation, learning difficulties, lack of financial support, psychosocial issues and group dynamics.

#### 4.7.1 Absenteeism

This was captured through the responses from the trainees on their experiences with learning groups and whether there members completed the training period. Their responses have been presented inform of frequency and percentage as shown on table 51.

Table 51:

Factors that Affected the Learning Groups during SGLM Training

Responses	Frequency (f)	Percentage %
Absenteeism	10	38.5
Attrition	5	19.2
Drop out	6	23.1
Members transfer to other groups	5	19.2
Total	26	100

The number of trainees who responded to this question were 26 and 38.5% cited absenteeism as one of the major challenges that affected their group work. Twenty three point one percent (23.1%) of the members also cited dropout as an issue during training. This can also be seen by the sample in the treatment having dropped from 30 to 26 members the variance being as a result of dropouts.

Absenteeism affected the organization of the learning groups as each member had been assigned a responsibility to enable the group attain the learning outcomes. To address

this challenge the group leader took over or delegated the responsibilities of the absentee to ensure that the group learning task was not interfered with. As the learners tackled absenteeism they also got a chance to enhance their leadership skills by sharing the group leadership roles at different stages through the task as well as problem solving as they worked through to cover up for the absence of their members.

The fact that the study established absenteeism and dropout as major challenges to training the vulnerable youth is consistent with Wilson (2013) findings that majority of the youth drop out of school programs for various reasons. One characteristic of group learning is interdependence among the members which enhanced unity and cohesion, each member viewed the other/s as a resource, recognized and respected the member's contribution toward the completion of group task. This was the main reason that group task was not affected by absenteeism but emerged more united and cohesive as they shared the tasks among themselves to achieve their expected outcomes. This view is also supported by Otten & Fennes (2008) observation, that group learning enhances learners' achievement of a common goal, improve interpersonal skills as they discuss the task and consider each other's views. The learners developed a team spirit as they contributed and work together to accomplish a task and emerged more cohesive. This makes consistency in attendance very crucial for every group members and the trainer should prepare for this occurrence before training is commenced.

#### 4.7.2 Lack of Passion and Self-Motivation

Responses were sought from the treatment group on the type of negative attributes experienced among members during training. The results have been presented in form frequencies and percentages as shown on table 52.

Table 52:

Negative Attributes Experienced by Group Members During Training

Responses	Frequency (f)	Percentage %
Lack of self-motivation	10	38.5
Lack of passion towards learning	7	26.9
Lack of interest	5	19.2
Fatigue	4	15.4
Total	26	100

From table 52 shows the responses from the treatment group on individual feelings through the training period. Thirty eight point five (38.5%) experienced lack of self-motivation, while 26.9% experienced lack of passion towards learning as the training progressed. These are negative attributes; lack of passion and low self-motivation among the vulnerable youth and could have contributed to the way the youth acquired the selected skills during training. These are common characteristics among the vulnerable youth, due to their life experiences and unsuitable environment.

This observation agrees with Morton and Montgomery (2011) that vulnerable youth have low self-concept and lack passion for life which affects their desire to change their lives for the better. Another perspective could be that the concept of making crafts was unfamiliar to the group and did not fore see any type of benefit upon learning the skills, hence the lack of passion. It is important to mention that this challenge was experienced in the first days and towards the last days of training but as the trainer employed interactive training methods accompanied with real craft items that were used as learning resources; the youth started making meaning and seeing opportunities. The participants comprised of youth whose life encounters and circumstances have forced them to transit to early adulthood, therefore interpreting any form of learning in relation to their social economic problems. This interpretation is consistent with adult learning theory as observed by Knowles (1984) that adult learners will develop interest in learning skills when they foresee benefits in the content. The other perspective may be that the training during of one month spread across three months could have been too long for the group. This makes the planning and organization of SGLM and supporting techniques very crucial when used on vulnerable youth as the process keeps the trainees motivated throughout the training period.

## **4.7.3** Learning Difficulties Among the Vulnerable Youth

Responses were sought on how the trainees gauged the content during training and the results are as shown on table 53.

Table 53:

How did you Gauge the Content Offered During Training

Responses	Frequency (f)	Percentage %	
Very difficult	9	34.62	
Moderate	9	34.62	
Less difficult	3	11.54	
Easy to understand	5	19.22	
Total	26	100	

From table 53, Thirty four point six percent (34.62 %) of the trainee in the treatment group felt that the content was very difficult while 34.62% that the content was moderate. For any form of learning to take place, communication with its many elements is crucial. The content to be learnt is also important, for this reason this study sort to establish how the treatment group members gauged the content that they covered in in crafts skills.

The study associated learning difficulties to the level of education, which inhibits the ability to understand concepts and take instructions, a fact that was explicitly manifested during group discussions and the presentations conducted at the end of the training. However the use of more interactive training methods such as role play and academic games created a platform for self-expression and following instructions. The implication is that contrary to the common belief that vocational skills training do not require any level of education or cognitive ability, it came out clearly during the study that some level of education and experience is required to enhance learning. This observation is consistent with the National Quality Council, (2010) which acknowledges that a persons' level of education affects their level of personal development, productivity and adaptability to different circumstances. This challenge if not taken care of at the beginning of training may affect the transferability of some elements of team work, time management, understanding processes and use of technology.

Among the described characteristic of vulnerable youth was level of education, table 7 shows that 58.3% of the youth had primary level education, 20% had secondary level and 18.7% had dropped out from the education system at different levels. All the same, the secondary level of education was questionable as the youth who claimed to have attained it had problems in expressing themselves in English and writing notes during the training. The issue of learning difficulties was moderated through the use of small learning groups; peer

learning, modeling behavior was practiced to cater for those who did not understand verbal and written concepts from the content.

## **4.7.4 Preferred Support Before the Training**

Responses were sought from group members on the nature of support they would have preferred to get before and during the training. The results are as presented on table 54.

Table 54:

Preferred Support by the Group Members Before & During Training

Responses	Frequency (f)	Percentage %
Provision of transport	4	15.41
Financial support	12	46.15
Rehabilitation	3	11.54
Psycho-Counseling	7	26.90
Total	26	100

## **4.7.5** Financial Support

As shown on table 54, responses were captured from 26 trainees, 46.15% felt that they should have been given some financial support before the training while 26.9% felt that they should have received some psychosocial counseling before and during the training. Most of the vulnerable youth have low level of education and have no skills training to offer them any reliable source of income. Furthermore majority were between the age of 14-20 years and had two or three kids, which means that they became mothers in their early teenage. Without a regular income and children to be provided for, time for skills training was not a priority. The young mothers were also susceptible to any form of abuse or engagements that could give them money, an aspect that resulted to their abuse. This observation is consistent with Zweig (2003), that one of the major problems keeping the vulnerable youth out of school is lack of financial support among others. The socio economic status of the vulnerable youth, their families and community affects their future outcomes. This challenge was manifested from the beginning of the study, where the participants indicated that it was not possible for them to attend the training throughout the week. Majorities (83.3%), of the participants were female and out of the group, 78.3% were single parents (Table 5). The participants did not have any form of employment or a regular source of income but depended on undefined activities to earn a living. This is why the training period was spread out for three months to give room for the trainees to look for money to sustain their children and attend to their other needs. The training was scheduled to take place twice a week on Tuesdays and Thursday but after the first week some participants expressed further dissatisfaction with two days therefore it was conducted once a week thus prolonging the training duration. This organization gave the learning group members time off for other roles and majority were able to participate in the training comfortably.

## 4.7.5 Adequate Psychosocial Support

The results of the study also revealed that the vulnerable youth disconnected with their families and society at an early age (14-20 yrs). Considering that at the time of the study the members had lived in Nakuru for three years and above, it means that they had left the family care at such a tender age most probably before teenage or in the early teenage years. This left them unprotected and vulnerable to all kind of risks such as drug and alcohol abuse, juvenile remand, sexual abuse and homelessness. These experiences at such an early age may have affected their personalities thus creating bitterness within the individual which was manifested as antipathy and withdrawal as well as low self-concept. With this type of character it would have been difficult to form cohesive learning groups as each of the participant felt they had nothing in common apart from vulnerability.

It is therefore important that any form of empowerment programmes for the vulnerable youth should include debriefing sessions as the youth dragged their past into play during the norming and performing stage of group training. Planning which was stage two of the seven steps of the SGLM training model included debriefing, whose purpose was to create a common bond for the group members as they shared their past experiences before active participation. Each day training session started with a debriefing session or an ice breaker intentionally designed to enable each member of the learning group share their previous day's experiences especially those not related to the training. This helped to motivate the trainees and address this condition so that participants were able to connect with each other's world and work as a team.

This approach concurs with Morton & Montgomery (2011) observation that the youth need emotional support to give them a sense of safety and belonging while motivational support provides guidance on available opportunities within appropriate boundaries. Vulnerable youth are disadvantaged victims of risk factors such as; family poverty, low

parental education, living in single or no parent households, having a child before age 18, dropping out of primary and secondary school education, learning disabilities and related conditions. The age at which these youth disconnected from the family, society and school system is too young for the experiences that they go through, hence the need for continuous adequate psychosocial support to assist them pick up their lives again.

## **4.7.6 Group Dynamics**

Responses were sought on the problems the members experienced in their learning groups, which may have affected group performance and the different stage at which the problems were experienced. The results are as presented on table 55.

Table 55:

Problems Experienced Within the Learning Groups During the Training n=26				
Responses	Frequency (f)	Percentage %		
Rudeness and arrogance from some members.	7	26.93		
Inadequate cooperation among members.	5	19.22		
Lack of commitment to group tasks.	5	19.22		
Laxity among members	5	19.22		
Divided interests	4	15.41		
Which Stage the Groups Experienced				
Problems				
During group formation	8	30.7		
Choosing the group project	6	23.1		
Executing the group project	4	15.4		
Group presentations	4	15.4		
Out-door activities	4	15.4		

The trainees cited several interpersonal problems that were experienced during the training. As presented on table 55, Twenty six point ninety three percent (26.93%) cited rudeness and arrogance among members, inadequate cooperation (19.22%), and lack of commitment to group tasks (19.22%), laxity (19.22%), and divided interests (15.41%) among members. These challenged posed a threat to group unity and cohesion and inhibited easy achievement of the group objectives. The study also wanted to know at stages at which these interpersonal problems were experienced and the results are also shown on table 55. Out of the 26 trainees who responded majority 30.7% felt that the interpersonal problems were

experienced during early stages of group formation, 23.1% felt that the problems were experienced when choosing the group project, 15.4% felt it was when executing the group project executing the group project, 15.4% felt it was during group presentations and 15.4% felt it was during out-door activities. Though these groups existed in their host communities before the training bring them together for a common goal posed new challenges.

The rudeness and arrogance was experienced during the group formation stage as they tried to understand and adjust to each other. Each stage in the learning process poses new challenges just like in life and that is why the youth groups manifested different challenges at different stages. However at the storming stage all sorts of differences come into play. When this fact is ignored then the early stages of group formation is prolonged and may affect the group performance. A group is a collection of individuals who share a common set of norms, assigned roles and jointly interact with each other to accomplish a common goal. Therefore the existence and success of a group depends on how well the members are able to interact and influence each other. Hence it was important to ensure that the learning group members were comfortable with each other and were part of the group learning objectives.

This observation agrees with Marcus (2014) that there are three elements that can affect group development positively or negatively; the group size, norms and the task. The group development follows the five stages of group development identified by Tuckman in 1965. The process started by forming where the members familiarized themselves with the learning task and with each other. Then storming stage, which involved developing group rules and procedures and sharing out responsibilities among the members. There are conflicts as members try to understand each other and search for identity in the group hence the perceived rudeness and arrogance. The next stage is norming whereby the group settles and resolves to move ahead with the task, they recognized their interdependence and how each person will contribute to the group task. The *performing* stage is where the learning groups developed some structure and coherently work with clear goals to perform a group task. The last stage was adjourning after the groups had accomplished their task of producing a craft item after the training. This process was not uniform as learning groups did not graduate from one stage to the other at the same time. However these differences did not affect the achievement of the expected outcomes as the groups had rules, goals as well as leaders to guide the process and ensure that the task was achieved.

Evaluating the group work as well as group learning was also a challenge as group grades can hide significant differences in learning, yet identifying what each team member

did or did not do in group task or during training can also be difficult. Hence the trainer needs to plan for group training with these challenges in mind so that to include mitigation strategies for and ensure effective training.

#### CHAPTER FIVE

#### SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This study set to determine the effectiveness of structured group learning model on enhancing acquisition of vocational, employability and lifelong learning skills among the vulnerable youth in Nakuru County. This chapter covers the summary of the research findings, conclusion of the study, implications of the study and recommendations.

#### **5.2 Summary**

The study identified the vulnerable youth groups and trainers in Nakuru County from which the trainees were obtained. The trainers involved were those engaged in community development work such as extension and social workers. The Structured Group Learning Model (SGLM) was introduced to the treatment group while the control group used traditional methods to train in craft skills. The summary section has been presented as per the five objectives of this study.

#### 5.2.1 Training Methods Used by Youth Trainers in Nakuru County

The study sought to determine the training methods used by youth trainers in Nakuru County. From the findings youth trainers in Nakuru County used demonstration, lecture and discussions while training the vulnerable youth. These methods are good for passing information but not for enhancing behavioral change. The study found out that SGLM as a strategy was not used with supporting interactive techniques role play, computer supported learning, academic games and simulations were either rarely used or not used. SGLM was facilitated through the rarely used techniques such as; computer supported learning, academic games, role play and simulations. The fact that most of the trainers used transmissive methods during training made the introduction of SGLM very relevant for training vulnerable youth as it results to behavioral change.

#### 5.2.2 SGLM and Acquisition of Vocational Skills

#### **Occupational Skills**

The study wanted to determine whether was an association between SGLM methods and acquisition of selected facets in occupational skills. The findings revealed that there was a statistically significant association between SGLM methods and skill in ability to prepare

the work station and ability to handle tools & materials during production. However there was no significant association between SGLM methods and acquisition of skills in observing health and safety in the work place ability to manage and reuse waste materials, ability to identify and mitigate risks during production, which means that these facets of occupational skills could not be acquired through SGLM methods.

#### **Craft Skills**

The findings also revealed that there was a statistically significant association between SGLM and acquisition of skills in ability to interprete sketches and verbal descriptions as well as ability to present finished products which are facets of craft skill. However the findings also revealed that there was no statistically significant association between SGLM methods and acquisition of skills in ability to develop pattern and specifications when making craft products which is part of vocational skills. This means that SGLM methods did not enhance these facets of craft skills among the trainees

#### 5.2.3 SGLM and Acquisition of Employability Skills

The findings of the study also revealed that there was a significant association between SGLM methods and acquisition of most of the selected facets of employability skills namely; ability to communicate and listening skills, team building, time and resource management as well as ability to develop practical solutions to solve production problems. However SGLM methods did not enhance acquisition of skills in ability to develop confidence and self-expression.

#### 5.2.4 SGLM and Acquisition of Lifelong Learning Skills

The findings of the study revealed that there was a significant association between SGLM methods and acquisition of some selected facets of lifelong learning skills namely; Ability to network and form partnership with other players in the craft industry, ability to recognize the importance of technology in craft related businesses. However SGLM did not have a significant association with acquisition in the desire to learn new skills and information literacy.

#### 5.2.5 Challenges Encountered During Training Using SGLM Methods.

From the findings of the study the following challenges were identified as what was encountered by the researcher and the trainees during the training. Namely; Absenteeism; Lack of passion and self- motivation; Learning difficulties among the youth; Lack of

financial and psychosocial support and Group dynamics. These challenges affected the training process inhibiting the time allocation and consistency of the training in one way or another.

#### **5.3 Conclusions**

From the findings it is evident that vulnerable youth trainers use traditional methods of training, which are the same methods used in class room teaching, instead of interactive methods used with SGLM which also address behavioral change.

The findings on acquisition of vocational skills showed that SGLM waseffective in the acquisition of two facet of occupational skills; ability to prepare the work station and ability to handle tools and materials during production but was not effective in the acquisition of skills in observing health and safety in the work place, ability to manage and reuse waste materials, ability to identify and mitigate risks during production which are also facets of occupational.

SGLM was also effective in the acquisition of some facets of craft skills; ability to interpret sketches and verbal and written descriptions into designs and skills in ability to present finished products. However SGLM was not effective in acquisition of skills in developing patterns/motifs as well as developing specifications.

The SGLM methods were effective in the acquisition of most of the selected facets of employability such as; ability to communicate, listen, and respond to questions, ability in team building and coordination, ability to develop practical solutions to production problems and ability to manage time and resources during production. However SGLM was not effective in the acquisition of skills in ability to develop confidence and self-expression. This skill is related to behavioral change like developing confidence and self-expression are better enhances through compliments and appreciation of one's efforts and achievements, which help to build confidence motivation and self-worth than through training methods.

In lifelong learning skills SGLM methods were effective in acquisition of ability to network and form partnership with other players in the craft industry, ability to recognize the importance of technology in craft related businesses. However the method did not enhance skills in desire to learn new skills and information literacy in the treatment group. It can therefore be concluded that SGLM methods are effective in the acquisition of specific selected facets of the skills in occupational, craft, employability and lifelong learning skills but not all skills can be acquired through SGLM methods..

On the challenges encountered during the training of the vulnerable it can be concluded that there are several challenges that need to be for effective results of SGLM methods when training the vulnerable youth. For effective training, the trainers have to look for a way of addressing the challenges before commencing the training.

#### **5.4 Implications of the Study**

From the findings of the study it can be suggested that SGLM is effective in enhancing some facets of vocational, employability and lifelong learning skills. However the youth trainers in Nakuru County do not use the method, hence the need to introduce it as strategy among the interactive and transformative training methods. The challenges associated with using the method exposes the gaps that need to be addressed for effectiveness of SGLM while training the youth.

Using SGLM to train this group may help in circumventing the long term social and behavioral problems associated with the youth and the revenue used to rehabilitate dysfunctional youth and setting up correction centers could be channeled for other developments in Nakuru County. This is due to the ability of the method to foster behavioral change that would lead to the youth being resourceful in the society.

#### **5.5 Recommendations of the Study**

From the finding of the study the following recommendations were made:

- County governments to develop policies on how to track and keep records of all the vulnerable youth in urban and semi urban areas so that they can be easily identified and accessed for services
- Regularly in-servicing of youth trainers by government or other stake holders to equip them interactive training methods that evoke behavioral change among the youth.
- National and County governments through establish non formal training programs in vocational skills to cater for skills and training needs of all the vulnerable/ disadvantaged youth to harness their ability to learn skills for sustainable livelihoods.
- Kenya curriculum development authority (KCDA) to reconsider their approach in teaching of life skills which are part of employability skills because this study has shown that these skills are inculcated better through interactive learning than classroom teaching.

- The National and County government development ICT centers in every sub county accessible to public and the vulnerable to serve as platforms for lifelong learning and enhance learning and information literacy.
- Universities and research organizations should look into the application of SGLM for transformative learning in higher education.
- More research to be conducted by Kenya Institute of Curriculum Development (KICD) on the use of SGLM to support Competence Based Education and Training (CBET) system.
- Academic and research organizations should replicate the study on a larger scale to benefit a larger population of the vulnerable youth.
- Further research to determine the methods that could lead to acquisition of skills that were not enhanced through SGLM in the study

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#### **APPENDICES**

## APPENDIX 1: YOUTH TRAINERS QUESTIONNAIRE (QTrs1)

Questionnaire for assessing the training methods used by trainers as well as the level of selected skills among the vulnerable youth in Nakuru County before the training.

Information given in this questionnaire will be treated confidentially for research purposes only. Please respond to all questions

Section A: Background information
1. Area of Operation (sub county)
2. Trainer's Specialization
3. Gender:
a) Male ( ) b) Female ( )
4. Highest level of education
a) Masters ( ) b) Degree ( ) c) Diploma ( ) d) cert ( ) e) others ( )
5. Types of activities in which the youth group members are involved. (Tick where
appropriate)
Games ( ) performing arts ( ) Mutumba' selling ( ) Hawking ( ) car washing ( )
Selling vegetable & fruits ( ) Selling cereals ( ) Value addition in foods ( )
Hair stylists ( ) Mobile launderette ( )
Others specify
5 Which of the following skills have your youth been trained on? (Tick where appropriate)
Business/Entrepreneurship
• Book keeping ( )
• Table banking ( )
• Sales and marketing ( )
• Basic computer skills ()
• Public Procurement processes ( )
• Group Dynamics ( )
Others specify
6. How would you rate levels of your trainees in the following skills:
Indicate (1) High, (2) Moderate, (3) Low, (4) Very low) where appropriate

# Craft skills Understanding sketches..... Interpreting verbal descriptions or sketches into designs..... Developing patterns..... Developing specifications..... Value addition of textiles. Branding & packaging the items..... Others specify ..... **Occupational Skills** Preparing the work place before production Selecting and handling tools and equipment..... Safety and health practices in production work place..... Managing and reuse of waste obtained from production processes..... Identifying risks in the workplace..... Developing mitigation measures for risks. Others specify ..... **Employability skills** Good listening..... Ability to work in teams..... Resolving problems.... Translating ideas into products..... Identifying opportunities..... Coordinating tasks..... Decision making..... Setting personal goals & vision. Self-confidence.... Lifelong learning Using a range of media..... Learning skills.... How to look for Information ..... Ability to learn new things.....

Adapting new technology.....

• Other methods....

### APPENDIX 2: QUESTIONNAIRE FOR TRAINEES (QT2)

Guided Questionnaire for collecting information on the status of the vulnerable youth as well their level of Vocational, employability and lifelong learning skills before training. Information given in this questionnaire will be treated confidentially for research purposes only. Please feel free to ask for any clarification if need be and respond to all questions

#### Section A: Background information

beetion in Buengi ound into interior
Center Name and sub county.
Group Name
Age group. 14-20yrs 21 – 27yrs 28-34yrs
Role in the played group
a) Official ( ) b) Member ( ) C) Leader( )
Gender: a) Male ( ) b) Female ( )
Marital status (Tick one): a) Single ( ),b) Married ( ), c) Separated ( ), d) Widowed( ),
Other (Specify)
i. Highest education level
• Primary Std.8 ( )
Primary school dropout ( )
• Secondary Form 4 leaver ( )
Secondary school dropout ( )
• Others (specify) ( )
ii. Which of the following vocational skills do you have an interest in? (Tick one and specify):
specify).

- Hair & Beauty ( )
- Dressmaking & Tailoring ( )
- Embroidery & soft furnishing ( )
- Leather & beadwork ( )
- Art Work ( )
- Others ( )
- iii. Which of the activities below are you involved in at the moment? (tick one and specify):

Incor	ne generating activity /Side hustle
•	Water vender
•	Charcoal
•	Old clothes 'Mutumba' selling
•	Hawking
•	Mobile Launderette
•	Selling vegetable & fruits
•	Mobile hairdresser
•	Others specify
iv	. How would you rate your skills level in the following skills:
(I	ndicate (1) High, (2) Moderate, (3) Low, (4) Very low) where appropriate
Occu	pational skills
•	Selecting and handling tools and equipment
•	Safety and health practices in production work place
•	Managing and reuse of waste obtained from production processes
•	Identifying risks in the workplace
•	Developing mitigation measures for risks
Craft	skills
•	Understanding sketches
•	Interpreting verbal descriptions or sketches into designs
•	Developing patterns
•	Developing specifications
•	Value addition of textiles
•	Branding & packaging the items
Empl	oyability skills
•	Good communication
•	Ability to work in teams
•	Resolving problems

Creativity/translating ideas into products.....

Identifying opportunities.....

Coordinating tasks.....

Decision making.....

•	Time management
•	Setting personal goals & vision
•	Self-confidence
Lifelo	ng learning
•	Using a range of media
•	Learning skills
•	How to look for Information
•	Ability to learn new things
•	Adapting new technology
•	Networking &partnership
•	Others skills (specify)

# APPENDIX 3: INTERVIEW SCHEDULE FOR POST TESTING THE TRAINEES (INS3)

Interview schedule for Post-testing acquisition of vocational, employability and lifelong learning skills among the trainees in the control and treatment groups after training. Information given will be treated confidentially for research purposes only. Please feel free to ask for any clarification if need be, during the face to face interview.

C4.	A -	D1.	<b>.</b> I	· · · - · · · ·	_ 4
Section	<b>A</b> :	Каск	graiina	intorm	arion
Section	1 <b>.</b> •	Duci	Sivana		ution

Center Name
Group Name
Member Number
Age group. 14-20yrs 21 – 27yrs 28-34yrs
Role in the played group a) Leaderb) Member
Gender: a) Male b) Female
Marital status (Tick one): a) Single (), b) Married (), c) Separated (), d) Widowed (),
e) Other (Specify)
Highest education level a) Primary Std.8 (b) Secondary Form 4 c) Dropped out in
primary school(d) Dropped out in secondary school e) Others (specify)

#### **Occupational skills**

- What is the importance of occupational skills during production?
- How would you deal with production waste?
- Which are some of the risks in your work environment?
- How would you reduce or avoid these risks?
- How do you prepare your work place before starting to work?

#### Craft skills

- How would you interpret verbal descriptions from a customer?
- What is the importance of branding of craft items?
- What value does packaging add to craft items?

#### **Employability skills**

- What have you gained or learnt from the group training sessions
- Do you now see a business opportunity in craft production?
- What is your comment on the team & coordinating your group activities?
- What is the importance of managing time and resources when servicing an order?

• What is your comment on your level of motivation and self confidence now

### Lifelong learning skills

- How do you look for information related to crafts production?
- What other services would enhance craft production?
- Why is it important to network and partner with other players in a craft production business?
- What is the importance of using internet and ICT services in your life?

# APPENDIX 4: OBSERVATION CHECKLIST- POST TESTING (OCL4)

Member Number.....

An observation checklist for post testing group members on selected skills during group task performance after the training. The instruments will assess the application of **vocational**, **employability** and **lifelong learning skills** among the group members. Information will be treated confidentially for research purposes only.

Cent	er				
Bran	d Name				
Obse	ervation Checklist for Occupational, crafts, employability and	lifelong	g learnii	ng skills	
S/	Skills Category	Poor	Fair	Good	Very
No	Vocational Skills:				Good
Occi	upational	1	2	3	4
i.	Preparation of the work station				
ii.	Handling tools and materials				
iii.	Safety & health practices during production				
iv.	Managing and reuse of production wastes				
v.	Identifying risks and developing solutions				
			•		•
Cra	ft skills				
i.	Interpreting verbal and written descriptions when making				
	crafts				
ii.	Developing patterns and specifications for products				
iii.	Presentation of the finished products				
Emp	oloyability Skills:				
Con	munication, Team work, Problem Solving, Creativity &				
	ovation, Planning & Organization, Self-Motivation				
i.	Listening and responding to questions				
ii.	Team building & coordination				
iii.	Developing practical solutions to problems during				
	production				
137	Managing time and resources				

v.	Developed confidence in expressing self				
Life	Lifelong Learning skills				
i.	Desire to learn other skills that would enhance craft				
	production				
ii.	Ability to network and partner with other players in a craft				
	production business				
iii.	Recognition of the importance of technology through				
	application craft production				
iv.	Behaviour management – so that all of the group members				
	have a chance to learn				

# APPENDIX 5: QUESTIONNAIRE ON CHALLENGES OF USING SGLM ON

#### (QCS 3)

#### **Instructions**

**VULNERABLE YOUTH** 

This questionnaire was administered to six learning groups which received the treatment after the training to evaluate the challenges encountered when using SGLM on vulnerable youth. The participants were assisted to make their responses by the research assistant. The questionnaire contains only one section; all items should be answered by ticking or providing information on the appropriate spaces provided. Any information given on this questionnaire will be treated with absolute confidence.

#### Sec

ctio	n 1		
1.	Did ex	perience any of the following in your learni	ng groups during training?
	i.	Absenteeism	
	ii.	Attrition	
	iii.	Drop out	
	iv.	Member transfer	
2.	Did al	the members of your learning group compl	ete the training? YesNo
3.	Which	of the following attributes did you experien	nce during the training?
	i.	Lack of self-motivation	
	ii.	Lack of passion towards learning	
	iii.	Lack of interest	
	iv.	Fatigue	
4.	How d	id you gauge the content offered during train	ning?
	i.	Very difficult	
	ii.	Moderate	
	iii.	Less difficult	
	iv.	Easy	
5.	Which	of the following support would you have pr	referred before the training?
	i.	Provision of transport	
	ii.	Financial support	
	iii.	Rehabilitation	
	iv.	Counseling services	
6.		of the following problems did you experien	nce from group members during the
	trainin	_	
	i.	Rudeness and arrogance from some member	ers. $\square$
	ii.	Inadequate cooperation among members.	
	iii.	Lack of commitment to group tasks.	
	iv.	Laxity among members	
	v.	Divided interests	
7.		at stage of the training did you experience the	ne problems in item six?
	i.	During group formation	
	ii.	Choosing the group project	
	iii.	Executing the group project	
	iv.	Group presentation	
	v.	Out-door activities	

# APPENDIX 6: FACETS OR ATTRIBUTES OF THE DEPENDENT VARIABLES OF THE STUDY

No.	SKILLS	ATTRIBUTES	BENEFITS TO INDIVIDUA	
	Employability		& OTHERS	
	skills			
1.	Communication	Listening, responding,	Contributes towards a	
		articulation,	productive and harmonious	
		Reading and writing,	relationship among the	
		Negotiating and understanding	trainees	
		other people's needs.	Helps members to relate	
			positively with others	
2.	Team work	Ability to define roles,	Contributes towards	
		Identifying and appreciating	productive working	
		other people's talents. Respect	relationship	
		other peoples values and	Enhances accountability	
		beliefs	and responsibility	
3.	Problem solving	Developing practical solutions	Results to effectiveness in	
		Use of different means of	the production processes,	
		solving problems	Customer satisfaction	
		Handling customers		
		complaints satisfactorily		
4.	Creativity &	Identifying opportunities not	Results to enterprising and	
	Innovation	obvious to others. Translating	resource fullness	
		ideas into products. Expressing		
		originality and imagination.		
5.	Planning &	Coordinating tasks, time	Contributes towards long	
	Organizing	management, Decision making	term and short term goal	
		& use of resources	setting and achievement.	
6.	Self-motivation	Ability to set personal goals	Contributes to satisfaction	
		and vision. Self-reflection and	and personal growth.	
		evaluation. Confidence in		

	expressing one self.	
Occupational skills	Selecting tools and materials	Enhances the safety of
	Handling tools and equipment	equipment and workshop
	Safety and health in the	as well as the people using
	workshop	the resource.
	Management and reuse of	<ul> <li>Reduces cost and lose.</li> </ul>
	waste	
	Identifying and mitigating	
	risks	
Craft skills	Understanding sketches	Improves the quality of
	Interpreting verbal descriptions	products
	Developing motifs/pattern	Results to customer
	Developing specifications	satisfaction
	Branding & packaging items	Enhances innovativeness
Lifelong learning	Information literacy	Results to better products
skills	Learning skills	Different ways of carrying
	Networking & partnership	out tasks
	Use of technology	Broader market and
		increased profit
		Easy and faster way of
		producing and selling
		products

#### APPENDIX 7: SWISS CONTACT FOUNDATION GROUP LEARNING MODEL

Group Based Learning Model which has been used by Swiss Contact foundation in Uganda successfully to train informal youth and women groups with vocational and business skills. The model is a nine step cycle and the process of training takes nine months. This model has been modified and the duration and steps reduced to suit this study.

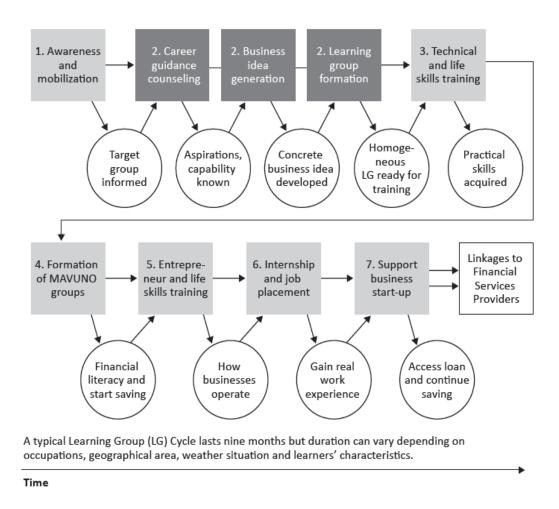
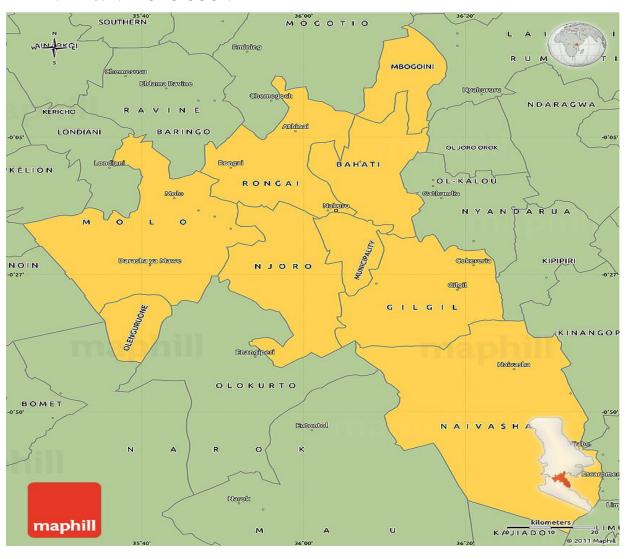


Figure 5: Nine-Month Learning Group Cycle as applied in Uganda (Gwamoiza, et al. 2013)

**APPENDIX 8: NAKURU COUNTY MAP** 



#### **APPENDIX 9: LETTER OF RESEARCH AUTHORIZATION**



## NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471, 2241349, 310571, 2219420 Fax: +254-20-318245, 318249 Email: secretary@nacosti.go.ke Website: www.nacosti.go.ke When replying please quote 9th Floor, Utalii House Uhuru Highway P.O. Box 30623-00100 NAIROBI-KENYA

Ref: No. NACOSTI/P/15/97441/8549

Date:

4th December, 2015

Peninah Wakiuru Kamau Egerton University P.O Box 536-20115 EGERTON.

#### RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "Effects of group based learning method on enhancing acquisition of selected vocational, social and lifelong learning skills among the youth groups in Njoro-Nakuru County," I am pleased to inform you that you have been authorized to undertake research in Nakuru County for a period ending 25<sup>th</sup> November, 2016.

You are advised to report to the County Commissioner and the County Director of Education, Nakuru County before embarking on the research project.

On completion of the research, you are expected to submit two hard copies and one soft copy in pdf of the research report/thesis to our office.

DR. S. K. LANGAT, OGW FOR: DIRECTOR GENERAL/CEO

Copy to:

The County Commissioner Nakuru County.

The County Director of Education Nakuru County.

#### **APPENDIX 10: RESEARCH PERMIT**

Permit No : NACOSTI/P/15/97441/8549 THIS IS TO CERTIFY THAT: Date Of Issue : 4th December, 2015 MS. PENINAH WAKIURU KAMAU of EGERTON UNIVERSITY, 0-20115 Fee Recieved :Ksh 2000 nJORO, has been permitted to conduct research in Nakuru County on for Science, Technology and Innovation National Commission for Science, Technology and Innovation National Technology BASED LEARNING METHOD ON ENHANCING ACQUISITION OF SELECTED

VOCATIONAL, SOCIAL AND LIFELONG
LEARNING SKILLS AMONG THE YOUTH Care. Technology and Inn. GROUPS IN NJORO-NAKURU COUNTY for the period ending on National Commission for Science 25th November, 2016 on National Commission for Science. Technology and Innovation Applicant sclogy and Innovation National Commission for Science Technology Technology and Innovation National Commission for Science and Innovation Technology and Innovation National Commission for Science and Innovation National Commission ommission for Science, Technology and Innovation National Commission for Science. ional Commission for Science, Technology and Innovation National Commission for Science, Technology and Innovation inside Commission for Science, Technology and Innovation National Commission for Science, Technolog