

**IMPLEMENTATION FACTORS OF TEACHING LIFE SKILLS  
EDUCATION TO LEARNERS WITH MULTIPLE DISABILITIES IN  
SPECIAL SCHOOLS IN MOMBASA COUNTY, KENYA**

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KENYA**

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## **DECLARATION**

I confirm that this thesis is my original work and has not been presented in any other university /institution for consideration. The thesis has been complemented by referenced sources duly acknowledged. Where text, data (including spoken words), graphics, pictures or tables have been borrowed from other sources, including the internet, these are specifically accredited and references cited in accordance with anti-plagiarism regulations.

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## **DEDICATION**

I would like to dedicate this thesis to Rebecca Neununa [Shitabule], my late grandmother who valued education and especially for women and to my daughters Cheryl Khandasi, Edith Lulu Namwela and Imani Nakoba. Let this work be an inspiration to you my girls to aspire you to greater heights of education.

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## **ABBREVIATIONS/ACRONYMS**

<b>CRC</b>	:	Convention on the Rights of the Child
<b>EARC</b>	:	Educational Assessment and Resource Center
<b>GoK</b>	:	Government of Kenya
<b>IFSP</b>	:	Individualized Family Services Plan
<b>KISE</b>	:	Kenya Institute of Special Education
<b>NCCK</b>	:	National Council of Churches of Kenya
<b>SNE</b>	:	Special Needs Education
<b>UNESCO</b>	:	United Nations Educational, Scientific and Cultural Organization
<b>UNICEF</b>	:	United Nations International Children’s Education Fund

## **ABSTRACT**

The focus of this study was the implementation factors of teaching life skills education to learners with multiple disabilities in special schools in Mombasa County, Kenya. These teaching methods require specially qualified teachers. This research investigated the extent to which this has effectively been implemented in Mombasa County. In addition, it established the role of the multidisciplinary team in teaching life skills to learners with multiple disabilities. To effectively teach such learners, one needs material resources. Thus, the researcher investigated the extent to which these resources are effectively used. In order to meritoriously address the set objectives, the research was limited to special schools in Mombasa County. It was based on the Social Learning theory by Bandura (1965) which basically looks at how learners learn behavior from society. This theory was used to investigate the methods used in teaching life skills. To attain my goal, Descriptive Survey research design was used. Data was collected from head teachers, life skills teachers and the multidisciplinary team through interviews and questionnaires. The location of the study was in Mombasa County. The key findings were that teachers use various teaching methods and they employ them differentially. Teachers had varied professional qualifications although a few of them wished they had further training. The Multidisciplinary team plays a critical role in learning. The teachers have resources for teaching although inadequate. There is a need for adequate funding to facilitate provision of learners with life skills. Institution heads should learn about the different teaching methods and formulate measures to support the teaching methods. The government should deal with the shortage of teachers. There is also a need to employ an interactive approach in teaching methods used in teaching life skills.

# **CHAPTER ONE**

## **INTRODUCTION AND BACKGROUND TO THE STUDY**

### **1.0 Introduction**

This chapter entails the background to the study, the statement of the problem, purpose of the study, objectives, research questions, significance of the study, delimitation of the study, limitations of the study, assumptions and conceptual framework. The theoretical framework will be based on the social cognitive theory by Albert Bandura (1965). Lastly, it will include operational definition of terms.

### **1.1 Background to the Study**

Life skills have an important role to play in the development of both an individual as a person and the community in which one lives. It is the methods used in acquiring these skills by learners with multiple disabilities that stand in need of investigation in this study. Jack & Furner (1998) gives a historical background on life skills education that came about in 1986 after the Ottawa charter for health promotion that recognized life skills in terms of making better health choices. The 1989 convention on the rights of the child, CRC, linked life skills to education that is directed towards the development and quality of life. The Dakar World Education Conference that took the position that all young people and adults have the Human Right to benefit from an education that includes learning to know, to do and to live together, followed this.

Life skills-based education addresses a variety of issues of child and youth development. It is expressed in the world program for human rights education (2004). The benefits of

learning life skills include making friends, building social and professional ties, participating in development, developing responsible behaviors, cultivating self-esteem, self-worth, fostering interests, hobbies, creating opportunities for independence with or without support and assuming adult roles in the community. The community benefits as it receives individuals who are well adjusted and ready to contribute to its development due to the unconventionality they will have learnt from life skills.

The right of every individual to be given access to skills enables one to learn how to survive. Survival skills acquired enable one to participate in activities that are relevant to the development of the individual at a personal level. Acquisition of these skills is one of the fundamental rights for all. The rights of children with multiple disabilities are also part of human rights according to article 2 of CRC which in international human rights treaty stipulates the realization of all rights to every child without discrimination, including on grounds of disability. This is an obligation to all governments (UNICEF, 2011).

In their reference to United States of America, federal definitions of disabilities, Best et al (2010) quote that one is considered to have multiple disabilities when there are concomitant impairments such as mental retardation – blindness and mental retardation – orthopedic impairment; the combination of which causes such severe educational needs that they cannot be accommodated in special education programs solely for one of the impairments; the term does not include deaf blindness. This means that multiple disabilities have interactional effects, making instruction and learning complex. This

study will focus on the learners with physical impairments with a combination of other concomitant impairments.

The Annapolis Valley regional school board (1996) describes that Learners with multiple disabilities may exhibit a wide range of behavioral characteristics depending on the combination and severity of disabilities, and the person's age. This may involve the tendency to withdraw from society fearfulness and anger. They may also exhibit impulsive behavior and frustration. In addition, they also have difficulty in forming interpersonal relationships and have limited self-care skills and independent community living skills. Physically, they have a variety of medical problems which accompany severe disabilities for instance seizures, sensory loss, hydrocephalus, and scoliosis. They may also be clumsy and awkward and may be unsuccessful in games involving motor skills. They may also exhibit self-injurious behavior.

A historical background to the education of learners with multiple disabilities is given by Gargiulo (2019) tracing it to Jean- Marc Itard 1775- 1838 in France. As a physician for the Institute for Deaf Mutes in Paris, Dr. Itard became responsible for the care and civilization of the "wild boy of Aveyron," also known as, "The Wild Child". This encounter is considered the first recorded effort to train a culturally deprived individual on a one-to-one basis, or on any basis. This boy, known as Victor, was unable to talk and had trouble walking.

Another pioneer is Eduard Seguin (January 20, 1812 – October 28, 1880) who was a physician and educationist born in Clemency, Nièvre. His work with children having

cognitive impairments in France and the United States is remembered. He developed instructional programs that helped learners with disabilities who other professionals had dismissed. These learners had been treated rather badly especially in the 16<sup>th</sup> century. Later institutions were created to take care of these learners.

Gargiulo (2019) states, “By the end of the 19<sup>th</sup> century, residential institutions for persons with multiple disabilities were provided, hence training and some form of education in a protective and lifelong environment”. Later the conditions deteriorated and there was overcrowding. He further notes that it is until the second half of the 19<sup>th</sup> century that special education classes began to appear in public schools and services began to be offered to learners with disabilities. Many of the classrooms were self-contained and learners were grouped and segregated. After the Second World War, the conditions of learners with multiple disabilities improved in the western countries mainly due to legislation and the leadership at the time.

Mac-Donald, A (2013) cites Eagar et al (2006) about a study that was done in Australia where the researchers found that learners with disabilities who were able to acquire daily domestic and self-care skills will be able to accomplish tasks after completing school. She further cites Sheppard and Unsworth (2010) that students who get an opportunity of everyday life skills will become more independent.

Kenya institute of curriculum development defines life skills as abilities that enable an individual to develop adaptive and positive behavior to effectively deal with challenges and demands of everyday life (wiki educator, 2012). In Kenya, the Persons with

Disabilities Act 2003 cover the rehabilitation, rights and offers equal opportunities for people with disabilities. These rights of individuals give an opportunity to learners with multiple disabilities to have access to acquisition of life skills that enable one to participate in activities that are known to contribute to the development of the society in which one is born and in which one lives at local level and international community.

The education for learners with multiple disabilities in Kenya is explained by Ndururumo (1993) as pioneered by churches and voluntary and charitable organizations. Before independence, only a handful of special schools and units existed. In 1964, a commission was created to investigate the formulation and implementation of national policies regarding the educational needs and capacities of children and the monetary and human resources required to service those needs. In the 1980s, there was marked growth in enrolment of children and expansion of programs.

Education of young people on life skills was important even before the coming of the Europeans. Nyachieo (1992) described this education as follows:

That education was moral, progressive, gradual and practical. The aims of these education was to transmit and conserve from one generation to another the wisdom and knowledge of the family, clan and ethnic group. It was also meant to make children adapt to the physical environment which was critical to their survival. They were also to know that the future of the community depended on the understanding and perpetuation of institutions, language and values handed down to them. Education took place anywhere i.e. in the home, in the fields, grazing grounds and so on. Through oral literature, the child was initiated into the

history and social fabric of society in terms of patterns of social behavior and even religious beliefs. Through ceremonies such as initiation, both boys and girls marked transition from childhood into adulthood. Later, even the missionaries came and found that Africans were what they considered to be barbaric and uncultured and therefore instituted a formal kind of education.

Over time, this social structure in African society eroded which resulted in young people lacking an opportunity to learn necessary life skills needed in life. Today, we are seeing problems of early pregnancy, lack of interpersonal relationships skills, emotional control, knowledge of physical changes, problem-solving and decision-making skills. These problems led to the introduction of life skills education in the Kenyan Secondary and primary school curriculum in 2008. In their report on the effectiveness of life skills education, the Kelin Kenya organization explains that The Network of Adolescent and youth of Africa conducted a situation analysis survey to find out the level of implementation of life skills education in Kenya and established that there were gaps in the implementation of the curriculum such as; inadequate numbers of trained teachers on sexual and reproductive health, religious conservatism, lack of capacity in institution, lack of skills to handle HIV and AIDS and abstinence approach to sexuality education (Kelinkeny,2012).

Youth issues have not been taken seriously in Kenya. It is after a publication by NCCK in 1967 titled ‘After School – what?’ that the government started having an interest in youth issues. This was in a report by GoK in 2007. The NCCK report brought about a debate on the transition of the youth. These further resulted in youth education, training and

employment. To address the situation of persons with disabilities, the respective act was enacted in 2003(GoK, 2004). Whereas this act has emphasized on the areas where the youth have challenges such as education, training, employment and social participation, the act does not highlight youth with disabilities. The act was guided more by charity as opposed to the notion of rights. In the national youth policy (2007) the physically challenged and mentally challenged are considered. This leaves out those with various sensory impairment and those with a variety of exceptional needs (Mugo et al, 2010). Learners with multiple disabilities have a variety of sensory impairment and exceptional needs and have been left out in terms of policy.

## **1.2 Statement of the problem**

Despite the life skills curriculum having been established to cater for all children, learners with multiple disabilities still have challenges in acquiring life skills to enable them to negotiate safer life situations. Learners with multiple disabilities face numerous physical, cognitive, and functional challenges such as limited communication, difficulty in physical mobility and may experience fine-motor deficits. Some of them forget skills they have acquired due to disuse and have trouble generalizing skills. They lack comprehension and exhibit poor problem-solving skills; these challenges among others hinder effective participation in normal instruction. Life skills curriculum has been established as the most appropriate strategy used to develop an identity and be able to explore the potential of the learners. By managing the emotions and acquiring information and services associated with adolescence to communicate and negotiate safer life situations. They also have limited interpersonal relationships which lead to feelings of loneliness. All these have a negative impact on them and their immediate family members.

If these learners are not equipped with the life skills, they are likely to become dependent and rely on caretakers leading to a sense of helplessness, despair and depression, lack self-determination and lack self-advocacy skills and have low self-esteem. Teachers therefore must possess relevant knowledge to influence life skills teaching in the school curriculum. Teaching them appropriate life skills can help them become more independent. This study therefore seeks to examine the implementation factors of teaching life skills education to learners with multiple disabilities in special schools in Mombasa County, Kenya.

### **1.3 Purpose of the Study**

The purpose of this study was to examine the implementation factors of teaching life skills education to learners with multiple disabilities in special schools in Mombasa County, Kenya.

### **1.4 Objectives of the Study**

The objectives of this study were:-

1. To examine the extent to which teaching methods are used by teachers in teaching learners with multiple disabilities life skills education;
2. To establish the extent to which professional qualification of teachers affects the methods used when teaching learners with multiple disabilities life skills education;
3. To establish the roles played by multidisciplinary personnel in teaching learners with multiple disabilities life skills education;

4. To assess the availability and the use of resource materials designed for use in teaching learners with multiple disabilities life skills education.

### **1.5 Research Question**

The study was guided by the following research questions:

1. What are the teaching methods used by teachers in teaching learners with multiple disabilities life skills education?
2. In which way does professional qualification of teachers affect the methods used when teaching learners with multiple disabilities life skills education?
3. What roles do the multidisciplinary personnel play in the process of teaching learners with multiple disabilities life skills education?
4. To what extent are resource materials available for use in the process of teaching learners with multiple disabilities life skills education?

### **1.6 Significance of the Study**

It was anticipated that the findings of this study may help the government come up with a curriculum for training teachers and offer in-service training for those already trained in life skills education. This may help the teachers to be better equipped in skills that should enable them to impart to the learners skills that will help them carry out their activities with more independence and greater participation on issues concerning them and others in the community. Findings of this study will enable the Kenya Institute of Curriculum Development to create a more relevant curriculum and a syllabus that should target these learners with multiple disabilities. The results of this study may help in developing resources that may be useful in teaching the learners. The findings may help the parents

understand their children and help the learners in making the transition of learners into adult life easier. The study may inform policy makers on what ought to be done to improve the access to life skills education by the learners.

## **1.7 Delimitation and Limitation**

### **1.7.1 Delimitation of the study**

Due to the nature of the disability of learners with multiple disabilities, they are mostly found in special institutions. This study limited itself to Tom Mboya School for The Cerebral Palsied, Port Reitz Special School and Tudor special school. These institutions have learners with physical disabilities who may have other disabilities such as autism, health impairment and so on. These include learners with cerebral palsy as they have physical disabilities which may hinder their movement. They have speech impairment, hearing impairment, learning disability and so on; hence they qualify to be multiple disabled.

The study also limited itself to learners with multiple disabilities within the ages of 12 and 25 years and to teachers who teach life skills education in these schools. Life skills focus on behavior change among adolescents. For this reason, the study limited itself to learners in this age group. The head teachers of these institutions were also involved in this study.

### **1.7.2 Limitation of the study**

This study focus has very little prior research which made it difficult to find literature concerning specifically life skills education to learners with multiple disabilities in

Kenya. There is scarcity of literature related to this topic including text books that can be used in instruction of life skills. The researcher mitigated this limitation by the use of the e-resources to fill in where books are not available. It was not possible to get a larger sample size because of the limited institutions serving learners with multiple disabilities. Further, the researcher had very little time to investigate deeply due to the fact the researcher was in full time employment at the time of conducting this research. Time was essential in the collection of data and in the interpretation. Consequently, the services of research assistants were sought to help with the collection and interpretation of data.

## **1.8 Assumptions**

The assumptions of this study were:

- a) Teaching methods are used by teachers in teaching learners with multiple disabilities life skills education.
- b) Professional qualifications influence the process of teaching learners with multiple disabilities life skills education
- c) The roles played by multidisciplinary personnel are useful in teaching learners with multiple disabilities life skills education.
- d) The material resources are available and in good state and are designed for use in teaching learners with multiple disabilities life skills education.

## **1.9 Theoretical Framework and Conceptual Framework**

### **1.9.1 Theoretical framework**

This study is based on the social cognitive theory postulated by Albert Bandura (1965). His research concluded that children learn to behave both through formal instruction and

through observation. Klein (1918) defines learning as “an experimental process resulting in a relatively permanent change in behavior that cannot be explained by temporary states, maturation, or initiate response tendencies” (p.2). Formal instruction includes how parents, teachers and other authorities and role models tell children to behave; observation includes how young people see adults and peers behave. Children’s behavior is reinforced or modified by the consequences of their actions and the responses of others to their behavior.

Bandura (as cited by Maag, 2016) believed that children learn many new social behaviors by observing important models by storing responses in their memory in the form of mental images. This process is referred to as observational learning. Through this, children learn new kinds of social behavior. To develop his theory, Albert Bandura did a study in 1965 on the effects of modeling and imitation. Maag says that Bandura had three groups of young children who were shown a film in which a woman engaged in acts of aggression toward an inflated doll known as ‘Bobo’. Bandura created three versions of the film, each with a different ending. One group saw the woman being praised and rewarded by another adult for her aggressive behavior, the second group saw her being scolded and punished for her aggression, the third group saw her receiving no feedback for her aggression. Later, the children were left with Bobo and other toys and were told to do what they liked. The children who had seen the model punished displayed less aggression than did the children in the other groups.

Bandura then asked the children to display for him everything they had seen the woman do. He promised them small prizes for each woman's behavior they could remember. This

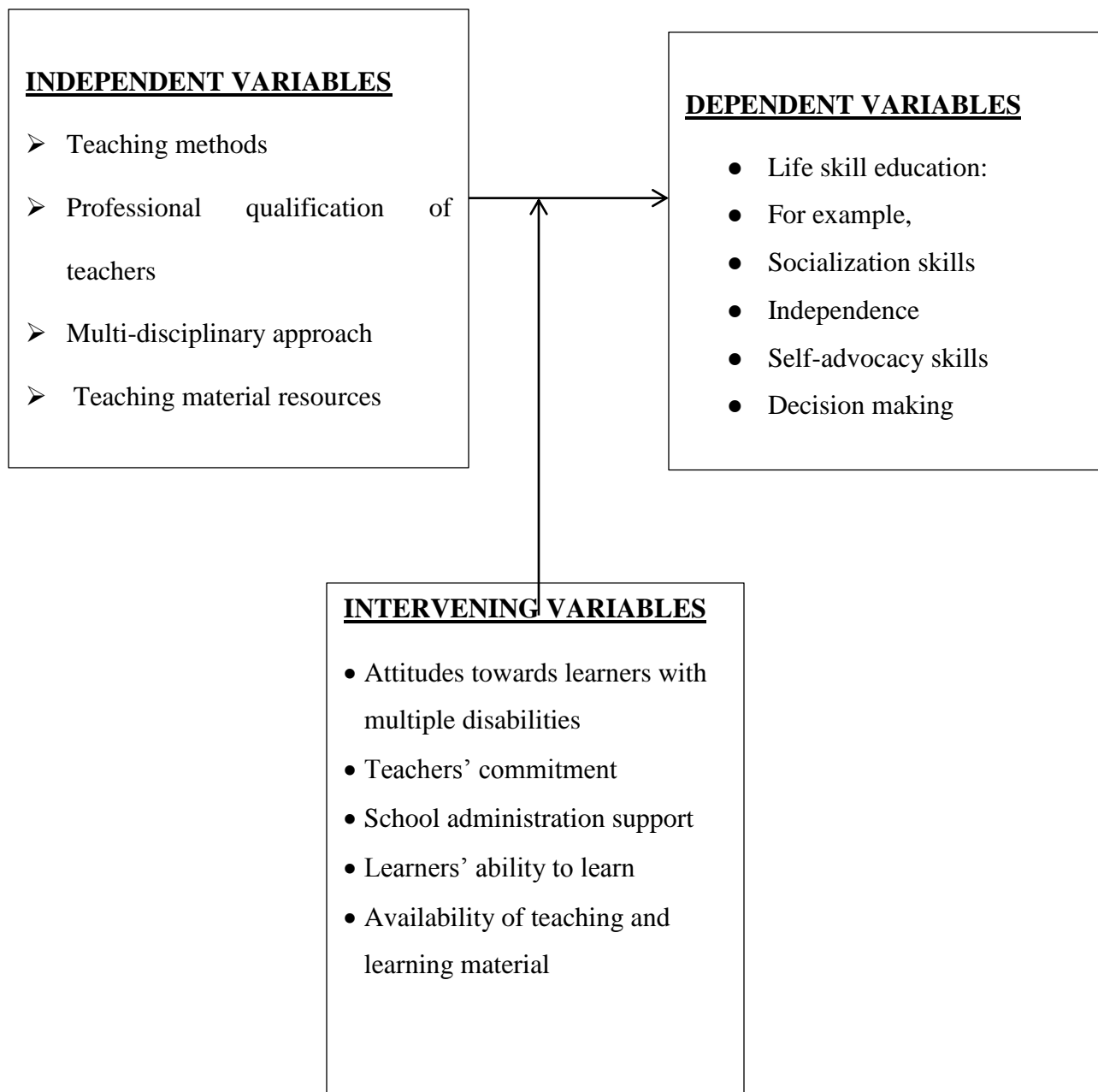
memory test with incentives offered for correct responses is a test of observational learning. Children in all groups demonstrated similar recall of the woman's behavior; this indicated that the children in all three groups learned the woman's behavior through observation but that the children in the model – punished group simply chose not to perform the aggression during the free play period; probably they feared punishment. This observational learning occurs covertly through the use of cognitive processes. Children can learn and memorize behaviors by observing and mental images formed of a model's behavior. Bandura suggested that imitative performance is under the control of cognitive factors because students perform a small portion of a model's behavior. This is known as expectation. There are two types of expectations, efficacy and outcome. Efficacy expectations refer to a student belief that she/he can perform the modeled behavior adequately. Outcome expectations refer to a student's belief that if he imitates certain behaviors, certain consequences will follow. Imitation will occur when the student expects a positive outcome.

This theory is useful to the research because it states that children learn to behave through formal instruction. This formal instruction is given in schools. Teachers are some of the authorities included in formal instruction. Teachers use teaching methods in formal instruction. Students learn the outcome they are likely to receive in three ways: receiving verbal instructions, past experiences of being either reinforced or punished for imitating certain behaviors and anticipate consequences for imitation by observing the outcomes that others receive for performing certain behaviors. These consequences are vicarious and can be either reinforcing or punishing. Interventions based on social theory have been used to treat a variety of behavior problems. It is also useful in teaching social skills. The

implications for skills-based health education planning are that skills teaching needs to replicate the natural processes by which children learn behavior: modeling, observation, and social interaction. Also reinforcement is important in learning and shaping behavior. Positive reinforcement is applied for the correct demonstration of behaviors and skills; negative or corrective reinforcement is applied for behavior skills that need to be adjusted to build more positive actions. Lastly, teachers and other adults are important role models, standard setters, and sources of influence. However, the concepts in the theory refer to regular learners. This research seeks to find out whether learners with multiple disabilities can learn behavior through life skills education.

### **1.9.2 Conceptual Framework**

The conceptual framework includes independent variables which are the teaching methods, the professional qualification of teachers, multidisciplinary approach and material resources for teaching. Life skills education is dependent on the independent variable for the learner to acquire skills like socialization, independence, self-advocacy and decision-making skills. The intervening variables are the attitudes the teacher has to the learner; the teachers must have commitment in teaching; the school administration must support the teachers in terms of making whatever is necessary for the teacher to deliver the content successfully and also the availability of the teaching and learning material resources. This is shown in figure 1.1



**Figure 1. 1 Conceptual framework**

Source: the researcher's

## **1.10 Operational definitions of key terms**

<b>Education</b>	Kenya institute of curriculum development defines it as the means by which individuals are equipped with knowledge skills and values that enable them to become productive citizens (wiki educator, 2012)
<b>Life skills</b>	Kenya institute of curriculum development defines it as abilities which enable an individual to develop adaptive and positive behavior so as to effectively deal with challenges and demands of everyday life.
<b>Material resources</b>	They are the tools used by teacher's every day to help students acquire knowledge.
<b>Multidisciplinary team</b>	A group of equal individuals who voluntarily work together in a spirit of willingness and mutual reward to problem solve and accomplish one or more common and mutually agreed upon goals by contributing their own knowledge and skills and participating in shared decision making, while focusing on the efficiency of the whole team
<b>Multiple disabilities</b>	In this study this can be defined as one who has physical disability and has concomitant disabilities impairment which causes such severe educational problems that they cannot be in special education programs solely for one of the impairments.

**Special schools**                      These are schools that have teachers who are trained to meet `pupils' needs and have facilities to make life easier for the pupil.

**Teaching methods**                This includes all approaches that a teacher may take to actively engage Students in learning

### **1.12 Conclusion**

This chapter has explained the researcher's definition of the problem which has been put in the proper context so as to benefit the researcher and the reader. The researcher has used questions to guide the work and was able to explain the significance of the study as well as recognize assumptions. The scope of the study was identified and explained together with limitations and delimitations of the research. A review of relevant literature related to the researcher forms the subject of the next chapter.

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.0 Introduction**

This chapter involves related literature for the teaching methods used by teachers while teaching learners with multiple disabilities, professional qualification of the teachers teaching the life skills, the role of multidisciplinary team personnel in teaching of life skills and the material resources available for teaching life skills.

#### **2.1 Teaching Methods**

Teaching methods are all the approaches that a teacher may take to actively engage students in learning. This means the teacher is responsible for coming up with means and ways of ensuring that learning is taking place and the students are involved in activities that will help the learner go through the learning process with positive outcomes. Klein, (2018) defines learning as an “experiential course that results in a comparatively permanent change in behavior which cannot be explained by impermanent states, maturation or inborn response tendencies”.

##### **2.2.1 Teaching Methods for Learners with Multiple Disabilities**

There are different schools of thought that have come up with philosophies explaining the different methods of teaching and the outcomes of the learners.’ Olio and Jeanine (2007) identifies five philosophies as academic rationalism, cognitive processing, and curriculum as technology, self-actualization and social reconstruction. In academic rationalism ‘Olio and Jeanine explain that it is focused on the acquisition of content

knowledge to the young. In this method, learners are regarded as empty vessels waiting to be filled with knowledge by the teacher.

Here, the recommended methods of teaching are lecture, direct instruction, the teacher demonstrates concepts as the learners observe, listen and take notes. In this method, text books are preferred. The learners are also expected to memorize the content. To evaluate students' understanding, tests are used. It is purely scholarly. They give the second method as cognitive processing. Here the focus is in exercising and strengthening the mind. In this case, emphasis is the development of the students' thinking abilities. The belief is that deductive teaching subverts authentic student learning. Students are not given an opportunity to discover. This is different from inductive teaching models which allow students to work with concepts "from inside out". Cognitive processing allows learners at any age to produce knowledge as opposed to receiving or replicating. This method of teaching is associated with people like Edward de Bono, Matthew Lipman, Maria Montessori, Jean Piaget, Robert Sternberg and Hilda Taba.

In addition, there is a curriculum as a technology teaching method. They further explain that this does not refer to using hardware, software, the internet, smart board or digital cameras in teaching. In teaching, curriculum as technology refers to technology of teaching, or a way to organize and deliver academic content. In the 1970s', some specific teacher behaviors were found to be effective for some students in the delivery of content in the U.S.A. The research led to the codification of these behaviors into a model of teaching known as direct instruction also called teacher effectiveness. This systemized how teachers were expected to behave in their classrooms and how they should be

educated and evaluated in their preparation programs. This system was referred to as competency-based-teacher education. Every subject was transformed into long term behavioral objectives. This was broken down to task analysis which is a short term objective that guides daily lessons. This is referred to as part of the whole curriculum and instructions.

The sequence of lessons is called continuum. Behaviorist learning theory is credited for this philosophy, that is, B.F. Skinner 1968. This method demands standardized testing. Students' learning does not depend on teacher's skills, interest and talents or lack thereof but rather on the quality of books, teacher's manual and supplementary materials. They further argue that a competency based teacher's instruction promotes teaching as a science at the expense of teaching as an art. They identify Nathaniel C. Cage, Robert Mager and Madeline Hunter as being associated with this philosophy.

The fourth method is self-actualization. This is associated with the humanist movement in psychology in the 70s' and 60s'. Humanism refers to the affective domain that includes feelings, beliefs, attitudes, personal value systems and levels of self-esteem. This philosophy asserts that students will be equipped and motivated to be successful, self-directed learners if educators take into account the development of the affective domain. This puts emphasis on the development of the whole child. This method promotes schools and the classroom communities. It provides students with a choice of activities and literature and by using non-traditional methods which includes an open classroom organization, positive classroom climate and student-centered instruction. The idea of self-actualization is credited to Abraham Maslow who developed the hierarchy of needs

which individuals must meet. If a student's physiological, safety, belonging and esteem needs are not met, it is unlikely that they would be able to concentrate on the intellectual & physical burden of schoolwork. Teaching innovations that promote self-actualization goals include project work, cooperative learning, teaching to the multiple intelligence, differentiated curriculum, peer assessment and self-evaluation. Others associated with self-actualization are Hubert, Neil, and Carl Rogers.

Lastly, there is Social Reconstructionism as a strategy of teaching. This strategy holds the view that society will be reconstructed as a result of the curriculum and instruction that are established, nurtured and maintained in the schools. Here, teachers are active agents of social change. The function of education is to help the learner to move beyond political situations and beyond experiencing school as a place to duplicate the current society and experience school as a place where society can be transformed. This means that learners are provided with an education that offers awareness of the injustices in society. This method involves group learning experiences, no special materials or textbooks, trips to places such as museums, parks, businesses, government facilities and so on (Olio and Jeanine, 2007).

In teaching learners with disabilities, teaching methods can be depicted as those that emphasize on particular sensory modalities or using alternative sensory modalities, using approaches different to those used with most children, using approaches similar to those for all children but with a particular emphasis or intensity. When teaching learners with multiple disabilities, not only does the teacher face the problem of choosing a teaching method but is also faced with a problem of communication. This is more so with students

with severe speech and physical impairments. This can impact on the learners' ability to learn, participate and interact with others (Farrell, 2009).

It is imperative that these students are taught how to communicate. In this case augmentative and alternative communication is needed. Doste and Politano (1956) (as cited by Best et al, 2010) define AAC as combinations of all methods of communication available to an individual, including any speech, vocalization, gestures and communication behaviors as well as specific communication methods and devices. The method of communication depends on the student's physical sensory and cognitive abilities as well as the ability to understand the student's communication partners and the environment in which communication is occurring. The teacher needs to use non-symbolic communication. In this method, symbols such as words or pictures are not used. This includes pointing, frowning, leaning away, groaning, screaming and pulling someone over to something. Communication is important because it helps in behavior regulation, social interaction and in joint attention. Another form of communication is symbolic communication. Best, et al defines "symbolic communication as using forms of communication that represents something else".

This can be classified as unaided or aided. Unaided form of communication is when communication occurs through some type of movement or vocalization that the person makes and does not require a physical aid or device, Vander Heiden and Lloyd 1968(as adduced by Best et al, 2010). Aided form refers to the use of any device or item that children may use beyond their bodies to communicate to other persons. The teacher needs to have various strategies while instructing using augmentative and alternative

communication. This is also needed for curricular modification and accommodation for these learners with multiple disabilities. Life skills curricular include the knowledge and skills individuals need for successful and meaningful participation in community and life experiences.

These skills complement those developed in the general education curriculum and expand the curricula options available for students with disabilities. “Life skills may be identified in domestic, community, leisure and vocational domains” Welman, 1996(as quoted by Best et al, 2009) and should be included in an option in curriculum planning across the age span. Best et al identify these skills as functional academics, daily and community living skills. Functional academics are those that are related to daily life activities. This includes purchasing items, reading cooking instructions and reading medicine labels, writing a shopping list, producing a signature and using computers. These are skills that will enable the student to live independently as possible on reaching adulthood. This curriculum cannot exist alone. For the learner to be holistically instructed, there is a need to incorporate it with general education.

In daily and community living skills, Cronin and Paton’s (1993) (as mentioned by Best et al 2010) list the domains that fall under this category as (a) employment/education (b) home and family (c) leisure pursuits (d) community involvement (d) community involvement (e) physical/emotional health and personal responsibility and relationships (including social skills and self-determination). These domains are further divided into sub-domains. In employment / education, the sub-domains are general job skills, general education/ training consideration, employment setting, career refinement and re-

evaluation. Home family sub-domains are home management, financial management, family life and child rearing. Leisure pursuits include indoor activities, outdoor activities, community/neighborhood activities, travel and entertainment.

Community involvement includes citizenship, community awareness, services and resources. Personal responsibility and relationships include personal confidence/understanding, goal settings, self-improvement and personal expression. In each of these domains, there are societal expectations of every individual. In employment /education, society expects that one is able to seek and secure a job, learn job skills, maintain a job , know about education options, gain entry to post-secondary education or training sessions, find financial support, have proper work habits, understanding company policies, understanding deductions in pay, managing expenses, exploring alternative career choices and pursuing career change .Concerning home management: setting household operations, arranging furniture, cleaning, laundering , performing simple home repairs, storing household items, reacting to dangers in the environment, maintaining a budget, paying bills ,purchasing items, renting a home, determining payment, improving scholastic abilities and displaying appropriate personal interaction skills, establishing and maintaining friendship, deciding upon potential spouse, communicating praise or criticism to others, dealing with conflict, solving marital problems, sharing personal feelings or experiences and writing personal correspondences.

Task analysis is another method that is useful in teaching skills to learners with multiple disabilities. Best et al (2010) explain that this involves breaking down skills, behaviors and activities into teachable units. This method allows teachers to identify the strengths

and needs of their students. It also allows them to observe and record the learning process, prioritize instructional goals and objectives, and plan for the sequence of instruction. Every task can be broken down into many components and sub components.

This means that teachers can use task analysis in instructing academic content in areas such as life skills education. To further task analysis, situation analysis is important in developing the curriculum. The situation in the home, school and community of the student is examined. Best et al show that these situations help in identifying the skills that can be task analyzed for direct instruction. The assessment that is used in examining the situation is known as ecological inventories. To develop ecological inventory, family members, co-workers and peers provide information. The ecological inventory can be used for developing curriculum content. This helps the teacher to know what the student knows and does not know. Life skills program or a school based program where life skills are imparted in a supportive learning environment are applicable for all ages of children and adolescents in school. However, the age group targeted is mainly 10 -18, adolescent years, since young people of this age group seem to be most vulnerable to behavior related health problems.

According to WHO (World Health Organization), document 8 shows that the lecture method can be an effective way to increase students' knowledge although there are other methods that are more effective in influencing the learner's skills, attitudes, and beliefs. Active, informal, personalized, and participatory learning methods that are culturally sensitive and age-appropriate are most effective in changing health related behavior and skills (Birdthistle & Vince-Whitman, 1997)(as cited in WHO document 8) and in

improving the relationship between teachers and pupils (Parsons et al 1988)(as mentioned in WHO document 8). Some programmers and researchers found that testing students on reproductive health information encourages them to take the class more seriously (Consensus Panel, 1997) )(as quoted in WHO document 8).Examples of participatory teaching and learning methods for skills building include: class discussions, brainstorming, role plays, small group activities, educational games and simulations, case studies, storytelling, debates, audio and visual activities such as arts music, theatre, dance, practicing life skills specific to a particular context with others, with verbal feedback and coaching and visits or telephone calls to relevant health and social support programs.

Educators have new expectations about what students will learn and this has changed the quality indicators. This evolution of curriculum expectations for learners with severe disabilities has been described by Browder et al (2003) and Browder et al (2004) as cited by Browder and Spooner (2011) that the first public programs were created in the 1970s at the time early childhood curricula was adopted by educators. This was as a result of the idea that education be based on a student's 'mental age'. With the emergence of the concept of the criterion of ultimate functioning, the previous developmental model was rejected in the 1980s in the application of criterion educators have used functional life skills. In the 1990s, social inclusion and self-determination were incorporated into the functional curriculum. Stone- Macdonald (2013) cites Agran et al (2006); Nietupski et al (1997) "a functional curriculum teaches students the knowledge and skills they will need in the community as adults, but there are few studies that support its effectiveness. The emphasis in the functional curriculum is on students learning skills to improve their quality of life". She further cites Daymond and Orelore (2001) who explain that the term functional can be used to

describe activities which people without disabilities would do independently and naturally. These activities include shopping, riding a bus and so on. The reason for having a functional curriculum is that these learners with developmental disabilities need explicit instruction on life skills and functional academics as they cannot acquire them from the daily interactions with their peers and adults. This is when they will increase their ability in life skills then their independent functioning, social competence and quality of life.

Curriculum for students with developmental disabilities has changed focus from functional skills to general education curricular in the United States. The current laws together with latest authorization of the individuals with disabilities improvement act (2004) supports all students apart from the most severe disabilities in their participation of the general education curriculum and taking standardized test (Browder & Cooper – duffy,2003, Browder et al 2007, Daymond and Orelove,2001 as mentioned by Stone-Macdonald, A 2013 p.28). Stone- Macdonald further cites Bouch (2004), Cronin (1996) Dever and Knapezyk (1997) Polloway et al 1991; researchers that have put emphasis on functional curricula while recognizing that students with disabilities are not prepared for adult life. In Tanzania, learners with disabilities are taught a functional curriculum to give them skills and knowledge for participation in society. Basic academics, communication skills and vocational skills are included in the curriculum (Kisani, 1995, Waziri wa Elimu na Mafunzo ya Ufundi, 2008 as pointed out by Stone- Macdonald, 2013). “Tanzania is coping with other challenges such as teacher shortages, lack of resources and societal barriers to school enrollment for students with developmental disabilities,” (society has failed children with developmental disability, 2010). These methods are useful. However, they do not adequately say about teaching learners with multiple disabilities life skills

education. In her findings Wang'ang'a (2014) explains that the teaching methods used in teaching learners with multiple disabilities should vary according to the learners cognitive ability. In addition she found the curriculum to be ineffective because it was not catering to learners with multiple disabilities. Wang'ang'a recommended that the teachers should be trained on different disabling conditions and the teaching methods to be used specific to the disabling condition. There is a need to find out whether the teaching methods are effective in teaching life skills to learners with multiple disabilities- the gap that this research seeks to fill.

### **2.2.2 Professional qualifications of teachers in the area of multiple disabilities**

Education is one of the principal motivating factors behind national economic development and it is the most effective way in which individuals can hope for better opportunities in life. This means that teacher training is very important so as to attain the desired national goals. Training helps a teacher understand professional skill and knowledge. Smith (1954) explains that this can be divided into four broad areas. The first is that the teacher must know the children with whom he/she is to work. The teacher must also have diagnostic skills. He must be able to determine each child's development in each of the many abilities, interests, and personality, as well as educational achievement. Thirdly, the teacher must possess a broad understanding of the educational goals. One must have a clear conception of the end toward which he is working. One must be able to set goals that will stimulate each child to make maximum use of his capabilities. Lastly, the teacher must know the effective methods for helping each child achieve maximum growth - must know how to assist the children to reach their educational

achievement, emotional, social and character development. One must be able to vary his methods to suit the individual needs and abilities of each child.

A debate has arisen from education for inclusion which has resulted in positive outcomes. It has forwarded the agenda for making a decision on programs that exist and the planning of changes to meet new training needs of teachers. There are systems that actively re-evaluate training models that exist through greater insolvency between training institutions and schools (Florian and Rouse, 2011 as advanced by Forlin).

Forlin (2012) explains that “in some systems, such as the UK and US, post initial training is a requirement for newly first qualified teachers to upscale during their first few years of teaching.” Inclusive education has changed the way learners with special needs are educated. Internationally, there is an evolution from the medical model of disability to a social model which can encourage and support the education of all learners in the same school and classroom. The preparation of teachers to meet the current trends has been addressed globally. Third has been done through compulsory or elective pre-service courses which involve stand alone, infused programs or inclusive education, school based or government funded professional learning courses (Florian,2011; Forlin 2010 as mentioned by Forlin). In the Japanese society for rehabilitation of persons with disability 2007-2015 report explains that:

The UNESCO report of 1995 on teacher training was analyzed for types of training, duration and the organization offering them. Out of 63 countries, only 48 have given adequate information about teacher training programs. An analysis of the available

information revealed that 26 countries offer general teacher training programs. An analysis of the available information is offered at the diploma level in 7 countries, at both levels in 3 countries. Detailed information on the availability of special education training programs is not available, but the criteria for becoming a special education teacher are reported by 15 countries. 39 countries have reported in-service training programs on special education for both regular and special education teachers on a regular basis.

The report further explains that in India, most of the teacher programs are one-year diploma courses that are after high school. These courses are run by non-governmental organizations. Bachelor of education degrees are offered in 6 university level programs. There are some aspects of teacher training programs that were included by the constitution of the rehabilitation council of India (RCI). In-service training is done periodically for teaching professionals to keep them aware of the developments worldwide and to make them equipped to face the challenges as a result of changing trends.

Teacher training, especially in-service training is important due to the revision concept of disabilities. For integration, teachers in ordinary schools are expected to teach learners with disabilities. In South Africa, a new approach to teacher training has been introduced known as a school-based approach. Here, training and support activities happen as part of a normal staff development program. This has its advantages. The first is that it avoids uncoordinated overload of in-service courses. Secondly, it allows for issues on inclusive education and development of inclusive practices to be integrated into general initiative in the staff development within the school setting. In Africa, there is a shortage of trained

teachers in special education. This has made many countries to use teachers with no special education training. The only country that has a special education curriculum in all its teacher training colleges is Botswana. Across the continent, there is increased favor in the teaching of special education in teacher training at certificate, diploma and degree levels. Special education courses are now offered in universities in Botswana, Ghana, Kenya, South Africa, Tanzania and Zimbabwe. Institutions that have been set up are: Special Education College in Ghana, College of Education at Oyo in Oyo state in Nigeria, Kenya Institute of Special Education in Kenya and Montfort College of special needs education in Malawi. In Uganda and Botswana institutions are being strengthened (Teseemma, 2011)

In recent years, attention has been given to students with special needs despite the fact that education for individuals with disabilities started as early as 1940 in Kenya (Mutua and Dimitrov 2001 as pointed out by Chityo et al 2015). Initially training of special education teachers was done on the job in the institutions. This was in the area of visual impairment or hearing impairment. Training for children with hearing impairment became the first specialized training that was done at Kamwenja teachers college in the 1970s. Later training for teachers for children with visual impairment or hearing impairment was done at Highridge teachers college in the 1980s. All special education teachers training was done at Kenya Institute of Special Education (KISE) in 1986. KISE develops curricula for training special education teachers (Republic of Kenya, Ministry of Education Science and Technology, 2004, as adduced by Chityo et al, 2015). KISE offers a diploma and certificate course in special education. In 1995 the first teacher education program was established at a degree level at Kenyatta University. KISE offers

full time, part-time and Open/distance and Electronic learning. The institution also equips teachers in an in-service program. The focus is in giving special education skills to the teacher trainees. The courses are skills oriented and practical. The trainees have 3 months of teaching practice where they are supervised by trainers from KISE and external evaluators from the ministry of education (Chitiyo et al, 2015).

Wang'ang'a (2014) found that teachers were inadequately trained to teach learners with multiple disabilities. This is because the training they had was not for a specific disability. In this regard teachers were unable to vary the teaching methods. Wang'ang'a noted that it was not possible to give personalized attention to learners with multiple disabilities because the number of teachers was not adequate and trained. Although, in 2009, a policy that supports the equitable access to quality education and training of learners with special needs was adopted by the government. However, it is still faced with a lot of challenges. In the rapid assessment report on effectiveness of life skills education in Kenya, 2012, by Kelin- Kenya organization, one of the gaps that were identified to the implementation of life skills education in Kenya is inadequate number of trained teachers in life skills education. This research seeks to fill this gap.

### **2.2.3 Multidisciplinary Personnel and Their Role in Teaching Learners with Multiple Disabilities Life Skills Education**

A collaborative team of professionals is needed so that students with multiple disabilities can experience school success. Ryndak (1996) as pointed out by Browder and Spooner (2011) defines the team collaborative as “a group of equal individuals who voluntarily work together in a spirit of willingness and mutual reward to problem solve and

accomplish one or more common and mutually agreed upon goals by contributing their own knowledge and skills and participating in shared decision making, while focusing on the efficiency of the whole team”. This collaborative team is made up of individuals from different disciplines. It is important for special education teachers to work with other professionals; this can be referred to as the multidisciplinary team. The teacher needs this team because they need the expertise of other individuals outside the field of education (Gargiulo, 2019). Examples of these related services are physical therapy, audiology, transportation, speech and language, psychology, recreational therapy, orientation and mobility, interpreting services, occupational therapy, nutrition, medical, social work, vocational education, rehabilitation counseling, parent counseling and school nurse services.

Gargiulo (2019) states that the concept of multidisciplinary team was originally mandated in PL 94-142 and was recently reiterated in the 2004 reauthorization of IDEA PL (108-446). PL94-142 refers to public law 94 -142 which was passed as an act known as education for all handicapped children in 1975 in the United States of America. This law guaranteed every child with disability to receive free and appropriate public education (United States education department).

IDEA refers to individuals with disabilities education act in the United States of America. Families with children with disabilities are recognized by law to need a variety of services from specialists. They also need a service coordinator who helps them locate, obtain and implement the specified services in the IFSP. The children for the services

under this idea are identified, screened and diagnosed by a multidisciplinary team (Kirk et al 2011).

In Dakar, Senegal, the special schools are separated by the types of disability. These schools do not take an account of learners with multiple disabilities. An assumption is made about the correct diagnosis that has been done. These schools have a large waiting list, overcrowded and lack resources yet they are required to provide rehabilitative services to students. Despite this, students receive therapeutic sessions two to three times in a year instead of on a weekly basis. These services are offered in the private centers where fees are paid for some limited access to professionals such as doctors, dentists, and speech and language pathologists (Drame and Kampoff, 2014).

In Kenya, educational assessment and resource centers (EARC) were established in 1984. The role of these centers is to ensure that there is early identification, assessment, intervention and placement of learners and trainees with disabilities. The centers are the first contact with the child at birth and relate closely with the child during the early development process. Early identification, assessment and placement is the role of development partners and others in the education sector. Early identification is necessitated by a multidisciplinary team. This team comprises: physiotherapist, occupational therapists, psychologists, nutritionists, social workers, SNE educators with specializations to cater for various disabilities and medical practitioners with specialization in different and relevant fields. There have been challenges in terms of personnel and a lack of resources (Ministry of Education, 2018). Wang'ang'a (2014) discovered that the individualized education plans that were meant for the learners were

arrived at without the involvement of the multidisciplinary team. This meant that the learners were not getting the much needed help. Most learners with multiple disabilities require support services related to the disability. Wang'ang'a gives examples of speech therapists and occupational therapists who were not accessible. This lack of help was hampering the potential of their learners in taking part in the pedagogical environment. This paper seeks to establish the roles played by the multidisciplinary personnel in teaching learners with multiple disabilities life skills education.

#### **2.2.4 Material Resources and Their Use in Teaching of Learners with Multiple Disabilities Life Skills Education**

One of the material resources is the curriculum. Howell and Nolet (2000) (as mentioned by Best et al 2010) offer a palpable definition of curriculum that is amenable to operational definition: "A curriculum is a structured set of learning outcomes, or tasks, that educators usually call goals or objectives". Students are expected to learn the information specified in the curriculum so that they will have the skills needed to transition from childhood into adult life. Curriculum is intended to prepare students to succeed in society. Consequently, the material in the curriculum comes from someone's analysis of what society requires for success.

There are four curricular options for learners with multiple disabilities as general education curricular with accommodations, general education curriculum with accommodation and modification, life skills curriculum and curriculum in modified means of communication and task performance (Bigge *et al.*,1999) (as pointed out by Best et al 2010). The curriculum reflects the demands of the student's life and focuses on

activities that are of immediate usefulness to the student and/or will be needed in future domestic, community and work, academic and social settings.

The teacher also needs collaborative team work. These are shared beliefs about the potential of all children and the type of instruction that best cultivates this potential. Ineffectual teamwork is often the result of members not having agreed on a common foundation. Paraprofessionals to give the teacher the necessary support to effectively deliver. It is important for paraprofessionals to be prepared for, and feel capable of, the tasks they are asked to perform. Paraprofessional competence is directly related to the degree of preparation received. There are skills and abilities involved with the paraprofessional position that are general to all students, some that are specific to students with multiple disabilities, and some that are specific to working in inclusive environments (Best et al). The classroom provides many naturally occurring opportunities as material resources for functional reading, functional mathematics, adaptive problem solving, job performance, communication and social interaction.

Goldsmith and Leblanc (2004) Mechling (2011) as adduced by Ayre *et al.*, (2013) state that “the emerging and widespread use of technology to support persons with disabilities is evident by the growing number of studies investigating the use of technology-based intervention including mobile technologies.” Life skills are useful in enabling the individual to have a productive daily life. If these skills are acquired limitedly, it may prevent learners with multiple disabilities from functioning independently. These learners are likely to be dependent on others for life. “Broadly, technology is no different from

any other tool. The power comes not from what it is, but rather how it is used (Goldsmith and Leblanc, 2004, Mechling, 2011 as cited by Ayre et al 2013).

Assistive technology under IDEA,2004, part b, section 612, (1) is defined as “any item, piece of equipment, or product system, whether acquired commercially of the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities.” Instructional technology is used specifically for teaching skills. It’s not necessary to use the technology once the skill has been learnt, for example, a software program that is designed to teach a typing concept (Ayre et al 2013).

In Rwanda, it was not the general lack of materials and assistive devices. Children with disabilities are not represented in textbooks. This representation could help in changing attitudes and stereotypes towards children with disabilities. There was no differentiation of the curriculum. The syllabus was taught without regard to the learner's understanding or level of learning. The special schools follow the national curriculum with adaptation and other schools develop their own (Mattingly and Subi 2016).

In Kenya, the institution charged with preparing the curriculum is the Kenya Institute of Curriculum Development formerly Kenya Institute of Education. It was established in 1964. The main role is to prepare new and relevant curriculum materials, revising current content, coordinating programs especially in teacher training, and initiating and promoting practices which can improve the quality and quantity of education. Curriculum development involves many professionals and groups of interests such as teachers,

teacher educators, university lectures, teachers' unions and so on (Eshiwani, 1993). In recognition of the right of learners with special needs, access to appropriate education is meant to actualize a learner's potential.

Kenya Institute of Curriculum Development (KICD) has provided a curriculum that responds to the learners' needs. Due to the severity of impairment of some learners, specialized skills are offered by the curriculum at the foundation level. Learners who fall into this category are those with mental disability, deaf blindness, severe autism, severe cerebral palsy, multiple impairments and profound disabilities. The curriculum covers communication, social and pre-literacy skills, activities of daily living skills and religious education, orientation and mobility, sensory motor and creative activities and pre-numeracy activities (KICD, 2017)

Many skills included in the domestic, vocational, personal management, community access and leisure domains occur most naturally in community environments. It is important that the core educational team invite and remain open to suggestions from the extended team members (e.g., consultant speech-language pathologists, occupational therapists, physical therapists, medical personnel) and continue to seek information from other sources such as professional reading, workshops and conferences. Wang'ang'a (2014) discovered that teaching resources for learners with multiple disabilities was inadequate which resulted in unfavorable effects on their learning. Wang'ang'a gives an example of some schools having workshops that did not have materials. These material resources are useful in teaching. However, there is a need to find out whether these

material resources are available and useful in teaching learners with multiple disabilities life skills education and whether they are available to the teacher.

### **2.3 Summary of Related Literature**

The teaching methods are all the approaches that a teacher may take to actively engage students in learning. This includes academic rationalism, curriculum as technology, self-actualization, cognitive processing and social Reconstructionism. Learners with multiple disabilities are taught using task analysis and participatory teaching and learning skills. Training helps a teacher to understand professional skill and knowledge.

Teachers trained to teach learners with disabilities have a diploma or degree in special needs education. Teachers work with other professionals known as the multidisciplinary team. The material resources needed for teaching are the curriculum, collaborative teamwork, Paraprofessional and the classroom. The gap that this research seeks to fill is the effectiveness of the teaching methods, inadequate training of teachers, the effectiveness of the multidisciplinary team and availability of material resources for teaching life skills to learners with multiple disabilities and whether they make persons with multiple disabilities to become independent and develop positive attitudes and economically independent. This was done through the examination of the implementation factors of teaching life skills education to learners with multiple disabilities in special schools in Mombasa County, Kenya.

## **2.4 Conclusion**

This chapter has been concerned with putting into light the teaching methods that are used. In addition, it has described the professional qualification of teaching and how it relates to skills acquired by the teacher. It has also shown the role of multidisciplinary personnel in the teaching of learners with multiple disabilities. Lastly, it explains the usefulness of the material resources in teaching. The next chapter gives details on the research design and methodology that was used by the researcher.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.0 Introduction**

This chapter explains the design of the study, the target population, the research variables, location of the study, sampling techniques, data collection, data analysis and the logistical considerations.

#### **3.1 Research Design**

A research design is very useful for any research to take place. Briggs et al (2012) define research design as the schema or plan that constitutes the research study. It is the means by which the objectives or aims of the study are fulfilled. In this study, a descriptive survey was used to obtain information concerning trends and determinants in the teaching methods used for teaching life skills education to learners with multiple disabilities in Mombasa. It had the potential of providing a lot of information obtained from a large sample of individuals participating in the research.

Descriptive research includes survey and fact finding enquiries. The researcher chose to use surveys in this study. It was useful as it gave the state of affairs concerning life skills education as it currently exists. In addition, the researcher was not in control over the variables. The researcher reported what has been happening concerning the teaching of learners with multiple disabilities life skills education (Kothar, 2004). The researcher was concerned with describing the characteristics of information resource persons involved in this study, which is about the teaching methods that teachers who teach learners with

multiple disabilities life skills education use. The characteristics were for the target population that is teachers, institution heads and multidisciplinary personnel.

In addition, the researcher was concerned with predictions, narrating the facts and the characteristics of these teachers, heads of institutions and multidisciplinary personnel. The descriptive research helped the researcher to define clearly what the researcher found, methods for measuring and defining the population of study. This design was useful in protecting against bias and maximized reliability in consideration for economical completion of the research study. The limitations of this design was that it was rigid because it focused on the objectives of the study, the methods that were adopted for data collection, sample that was selected, collecting the data, processing and analyzing the data and reporting the findings (Kothar, 2004).

Questionnaires and interview schedules were used by the researcher to get information from the participants. Questionnaires were advantageous because the researcher needed not to be present during the collection of data. Also they were free of biases and saved time. Interview schedule was used together with the questionnaires. These enabled the researcher to gather information on the views of the respondent. It also allowed the interviewer to make a judgment on the signs that were being read. In this way it located the data in the context in which they were collected. Surveys are useful in judging opinions from a population and can help in changing strategies. The responses were tabulated and reported in the form of frequencies and percentages. These were derived from the answers to each of the questions. This facilitated the use of a detailed description of the current phenomena. The intention here was giving the real and actual

situation at the time data was collected. It also facilitated suggestions on ways of improving the procedure of collecting data. Qualitative techniques were used to supplement information obtained through qualitative methods. It enabled respondents to have a wider description i.e. they allowed respondents to make descriptions that were vivid at the time of data collection. It provided the researcher with the information about views, attitudes and feelings of the participants concerning the problem under investigation (Briggs et al, 2012).

### **3.2 Variables**

In this study there were both independent and dependent variables.

#### **3.2.1 Independent Variables**

The independent variables in this case were methods of teaching, the professional qualification of teachers, the multidisciplinary approach and instructional materials and resources. The intervening variables were the attitudes towards learners with multiple disabilities, teacher's commitment, availability of teaching and learning materials, school administration support and learners' ability to learn.

#### **3.2.2 Dependent Variables**

The dependent variable in this research was life skills education.

### **3.3 Location of the Study**

Mombasa County is one of the 47 counties in Kenya (App.6). It is the smallest county covering an area of 229.7 km<sup>2</sup> excluding 65 km<sup>2</sup> of water mass with a population of 939370 people according to the 2009 census. Majority of the people live in the urban

areas. It is situated in the south eastern part of the former coast province. Mombasa County borders Kilifi County to the north, Kwale County to the southwest and the Indian Ocean to the east. Administratively, the county is divided into 4 sub-counties: Mombasa Island, Changamwe, Likoni and Kisauni. The county is composed of 6 constituencies; Changamwe, Jomvu, Kisauni, Nyali, Likoni and Mvita. It lies within the coastal lowland, which rises gradually from the sea levels to slightly over 70m above sea level in the mainland west. The highest point rises up to 100m above sea level. Mombasa Island is separated by Kilindini harbor and Tudor Creek and connected to the mainland by the Nyali Bridge, Likoni ferry and Makupa Causeway.

The study was carried out in Mombasa County in the Mombasa region. The universal declaration of human rights that was proclaimed by the United Nations general assembly held in Paris on 10<sup>th</sup> December 1948 resolved to have a common standard of achievement for all people and nations. Article 26 of this document states that, “everyone has the right to education”.

In addition, it states, “Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms”. Learners with multiple disabilities are human beings who deserve to enjoy this human right. The researcher chose this locality on the basis of wanting to find out whether these learners are enjoying this right. The location has three schools that have these learners with multiple disabilities. These schools are Tudor special school, Port Reitz special school and Tom Mboya School for Cerebral Palsy.

It was also convenient for the researcher who resided in the locality during the time of this study. According to the Kenya national bureau of statistics report, 2010, on informal settlements in Mombasa, twenty-nine percent of children aged 2-9 years have at least one disability. In addition, thirteen percent showed delay in developmental milestones such as sitting, standing and walking. Lastly, seven percent cannot speak or understand words. This informed the researcher to choose the location of the study due to the prevalence of children with disability.

### **3.3.1 The Study Sites**

Study sites included schools where methods of teaching life skills education and their use in teaching learners with multiple disabilities take place.

### **3.3.2 Composition of Study Sites**

There are a variety of institutions in this area that learners with multiple disabilities receive services. At the time of starting the field inquiry in October 2018 there were 7 special schools in Mombasa County that were approved and registered with the Ministry of Education. These were Likoni school for the visually impaired, Pwani school for mentally handicapped (Kisauni), Port Reitz school for the physically challenged, Tom Mboya school for cerebral palsy, Ziwani school for hearing impaired, Tudor special school and Mombasa secondary school for physically handicapped. In addition, there are 23 special units in the public primary schools in Mombasa. There exist 5 home based programs although not functioning at the moment due to lack of funds. There are 9 private institutions that offer special needs programs. Lastly, there are two rehabilitation centers dealing with learners with emotional and behavioral disorders. These institutions

provide services to learners with multiple disabilities. The distribution of the 7 special schools are government sponsored schools.

**Table 3.1 The distribution of the 7 special schools**

SCHOOL	SUBCOUNTY	LOCATION
Pwani school for the mentally handicapped	Kisauni	Kisauni
Port Reitz school for physically challenged	Changamwe	Port Reitz
Tom Mboya school for cerebral palsy	Mombasa island	Tononoka
Ziwani school for hearing impaired	Mombasa island	Shimanzi
Tudor special school	Mombasa island	Tudor
Mombasa secondary school for physically handicapped	Kisauni	Bamburi
Likoni school for the visually impaired	Likoni	Mtongwe

### 3.3.2 Sampling of the Study Sites

This researcher was interested in learners with multiple disabilities. Thus, the researcher used purposive sampling. Briggs et al (2012) explain it as a strategic attempt to establish a good correspondence between the research questions and the sample. Consequently, the researcher sampled with the basis of getting information from people who are relevant to the research questions (Bryman, 2008). There are three schools with learners with multiple disabilities. The researcher has purposely chosen these three for further investigation. The researcher is interested to know the methods in the three and how they are used and the role of multidisciplinary personnel. The three schools are Tudor Special

School, Port Reitz Special School for the physically challenged and Tom Mboya School for the cerebral palsy.

**Table 3.2: The Three Schools**

<b>SCHOOL</b>	<b>SUBCOUNTY</b>	<b>LOCATION</b>
Tom Mboya school for cerebral palsy	Mombasa island	Tononoka
Tudor special school	Mombasa island	Tudor
Port Reitz school for physically challenged	Changamwe	Port Reitz

### **3.4 Population**

The population comprised information resource persons taking part in the implementation of government policy on the teaching of life skills education in the 7 institutions in Mombasa County. These informants were critical to the investigation since they provided most of the insightful, analytical and specialized information from which the study based its findings, conclusion and recommendations.

#### **3.4.1 Composition of Informants**

The population composition for this study consisted of 124 respondents from all special schools and units in Mombasa. They consisted of 7 head teachers, 102 special education teachers in special schools and units, 15 multidisciplinary team members. Mombasa county Educational Assessment and Resource Center officer in charge Mr. Iddi provided this data in March, 2014. The head teachers, teachers who teach learners with multiple disabilities life skills education and multidisciplinary personnel were selected since they were directly involved with these learners therefore could provide important information

that could be used to examine the teaching methods used for teaching life skills education. Ideally, the inquiry should have included all 124 respondents. Since the number of this population was large and widespread, application of research instruments to each person was likely to cause financial and time problems. Besides this, the researcher was interested in special school with learners with multiple disabilities.

### 3.4.2 Sampling

Since the investigation was aimed at learners with multiple disabilities, this researcher used census sampling techniques to pick all the three schools with these kinds of learners. The schools that were relevant for this study included Port Reitz Special School, Tom Mboya School for the Cerebral Palsied, Tudor Special School and Mombasa Secondary School for The Physical Handicapped These populations were purposely selected for participation as information resource persons as shown table 3.3.

**Table 3.3 Sample Size**

<b>Institution</b>	<b>Respondent</b>	<b>Target population</b>	<b>Sample size</b>	<b>%</b>
Tom Mboya School for the cerebral palsied	Head teachers	1	1	100
	Teachers	10	10	100
	Multi-disciplinary team	5	5	100
Tudor special school	Head teachers	1	1	100
	Teachers	4	4	100
	Multi-disciplinary team	5	5	100
Port Reitz special school	Head teachers	1	1	100
	Teachers	11	11	100
	Multi-disciplinary team	5	5	100
	<b>Total</b>	<b>43</b>	<b>43</b>	<b>100</b>

### **3.5 Research Instruments**

The research instruments that were used in this study were questionnaires and interview schedules. These were used to get data from the respondents from all the institutions. The two instruments used for data collection were (a). Questionnaires for teachers and multidisciplinary-Appendix 3 and Appendix 5 (b.) Interview schedule for heads of institution- Appendix 4.

#### **3.5.1 Interview Schedule for Head Teachers**

Interviews were conducted to identify the number of teachers in the institution that teach life skills to learners with multiple disability; the number of teachers trained and their levels of qualification; the age group of learners in the program; the kind of in-service training teachers in the institutions get; the frequency of training and the impact of the training in the quality of teaching, and how quality is measured. It also gave information on material resources and accommodations available at the institution.

It gave data on the implementation of the program and those involved in the implementation process such as the paraprofessionals, members of the multidisciplinary team and the community. Lastly, the interviews were used to find out about the material resources available in the institution.

#### **3.5.2 Questionnaires for Teachers**

For the teachers, the instrument identified the teachers' age bracket, level of education and the college attended. It will show the opinion of the teachers concerning qualification and its influence on the quality of teaching life skills. Also, the in-service training

received by the teachers, the number of times received, their feelings on this training and areas trained. In addition, whether the school has a program for life skills education, when it began, their rating of teaching life skills, the age of the learners, methods used to teach, the challenges faced in the teaching of life skills, the accommodation available and the effectiveness of AAC in teaching life skills. It also showed the members of the multidisciplinary team that work with the teachers, areas they felt needed the input of the multidisciplinary team, their availability to the institution, when they meet with the team for consultations, the competence of the paraprofessionals and how informed they are concerning teaching life skills to learners with multiple disabilities. It also gave the rating for the learning outcomes, the needs met by individual learners, the curriculum considerations, the adequacy of the text books, the ICT accessibility, adequacy of illustrations in textbooks and teaching media used in the school.

### **3.5.3 Questionnaires for Multidisciplinary Personnel**

It gave data on the area of specialization, their participation in in-service training of teachers, the frequency of this training and their rating on the impact of multidisciplinary teams in the quality of teaching life skills education. It also showed the age of the learners in the program, their assistance in developing accommodations for the learners, their rating of the use of assistive devices, the challenges they face as members of the multidisciplinary team and their rating on their involvement in creating individualized education plans for the learners. In addition, the areas of teaching that have improved due to their involvement when they meet for consultations, their rating on the competency of the paraprofessionals in assisting teachers, how they provide information to the

institutions they are attached to and their suggestions concerning adequacy of the information in the institutions they serve.

### 3.5.4 Response Rate

In this section, the researcher sought to find out the number of questionnaires that were returned after the data collection process. The following table gives an illustration of the study's response rate.

**Table 3.4 Response Rate for the Study**

<b>Respondents</b>	<b>Target population</b>	<b>Head teachers</b>	<b>Teachers</b>	<b>Multidisciplinary teachers</b>	<b>Response rate</b>
Tom Mboya	16	1	6	2	56.25%
Port Reitz	10	1	4	1	60%
Tudor	17	1	7	3	64.71%
<b>Total</b>	<b>43</b>	<b>3</b>	<b>17</b>	<b>6</b>	<b>60.3%</b>

The response rate for the study is 60.3%. According to Fincham, (2008), the response rate should be a minimum of 60 percent of the sampled respondents. In this case, the response for the study surpassed the recommended level hence; the study met the required conditions to achieve representativeness.

### 3.6 Pilot Study

The pilot study took place at Port Reitz Special School. This was suitable for pilot study because it had similar characteristics to the targeted schools and it had learners with physical disabilities who had other concomitant conditions. In addition, there was an

educational assessment and resource center in the institution. This gave the researcher an opportunity to get information from the personnel involved in the education of learners with multiple disabilities. The target population in this study was one head teacher, ten teachers, and five members of the multidisciplinary team. The sample size that took part was one head teacher, three teachers and one multidisciplinary member. The pilot study was useful in making adjustments to questions on the questionnaire for multidisciplinary teams that brought answers that were not expected by the researcher. The questions were on areas of specialization. The respondents understood that they were to give the location of where they were practicing and gave the response as Mombasa. The researcher reframed the question to show their specialization as members of the multidisciplinary team.

### **3.7 Data Collecting Procedure**

The researcher was given permission to conduct the study from the graduate school of Kenyatta university. This letter was attached together with the research proposal and sent to the National Council for Science and Technology. A one-year research license was issued. This license was attached to a letter addressed to county director of education Mombasa to seek an introductory letter to be sent to the schools that were to be sampled. The introductory letter was issued and the researcher attached individual letters to the school heads. The research assistant visited the schools to meet with the respondents and set the date for administering the questionnaires. Questionnaires were preferred in this study because descriptive data are usually collected through questionnaires and each item in the questionnaire addressed specific objective and research questions. Interview schedule was used to collect data from the heads of institutions.

### **3.8 Data Analysis**

Data analysis involved a number of closely related operations that were performed with the purpose of summarizing the collected data and organizing these in a manner that they answer the research questions (Katha, 2004). It could also be seen as the process of ordering and structuring data from the field so that one would understand the overall meaning in relation to the project (Kavulya, 2007). In this research, Simple descriptive statistics was used where data was analyzed through qualitative data analysis. The data collected was entered into the statistical package for social scientists (SPSS) software version 22 to code and generate statistical tools like percentages, pie charts, bar graphs and frequency tables which was used to represent the teaching methods used, qualification of the teachers, the use of materials in teaching and the input of the multidisciplinary team and how they relate to the acquisition of life skills by the learner. In this way, the statistical tools were used to answer the research questions.

Conversely, qualitative data from the head teacher interviews was analyzed using thematic analysis. The process entailed an in-depth evaluation of the interview transcripts to identify the recurring themes in the respondents' assertions. Besides the study utilized deductive coding since it guarantees that all areas of interest are covered and it is time saving. A flat coding frame that entails assigning the concepts the sales levels of specificity was used to identify the recurring themes from the interviews. Thematic analysis is advantageous since it permits gathering detailed data about a phenomenon, thereby enhancing the effectiveness in answering the research problem. In this case the study aimed to generate knowledge on the teacher's professional's attributes and available training programs to strengthen their teaching skills.

### **3.9 Logistical and Ethical Considerations**

Confidentiality is having another trust and trusting others with information. This means that the information that was given by the participants was held in confidence by the researcher thus any pertinent information would not be divulged for any reason. The researcher assured the participants of confidentiality in writing in the introduction of the questionnaires (Fraenkel and Wallen, 2012). Anonymity means the state of remaining unknown to most other people. The participants were assured in writing that their identities would be masked as much as possible in any report of the research outcomes and processes. The researcher ensured this was done by not asking the participant to give their names in the questionnaires and interview schedule.

Within educational research, care was taken that the interests and well-being of people were not harmed directly and indirectly as a consequence of research in which they had participated (Fraenkel and Wallen, 2012). Physical harm involves any damage to the body caused by violence. This means that participants were not subjected to any form of violence or forcefully asked to respond to the questions. Psychological harm is a type of damage that affects the psyche that occurs as a result of a severely distressing event. This can be through the reputation of participants and credibility being undermined publicly. The participant gave information in a free environment that meant that their opinions were respected and would not be influenced by external forces (Lankershear and Knobel, 2004). The researcher had a valid research design so as to save on time and not to waste participants time which would lead to their refusal to participate in any other research studies and to enable the researcher to do the proposed research (Lankershear, & Knobel, 2004). The participants in a qualitative research project needed to give their informed

consent with regard to their participation in the project. This was done through the ministry and an information letter that explained what the research was doing, what risks if any were to be involved, what the participants were protected from and so on.

The researcher was given a license to collect data by NACOSTI together with an introduction letter. This was presented to the county director of education who in turn wrote an introduction letter to the sub county directors of education. The sub county directors wrote a letter to the heads of institutions. In this way, the participants gave informed consent to participate in the research (Lankershear and Knobel, 2004).

### **3.10 Conclusion**

This chapter was concerned with giving the research design that was used by the researcher in this study. It also described the variable of the study. In addition, it gave light to the population that the researcher was interested in and the technique the researcher used to arrive at a sample. The researcher described the research instruments that were used to arrive at the sample. Lastly, the ethical considerations were highlighted. The next chapter entails the presentation of data and the analysis of results.

## **CHAPTER FOUR**

### **DATA PRESENTATION, ANALYSIS OF RESULTS AND DISCUSSION**

#### **4.0 Introduction**

The chapter focuses on the results from the analysis process together with an in-depth interpretation of the findings. The core aim of the study was to examine the implementation factors of teaching life skills education to learners with multiple disabilities in special schools in Mombasa County, Kenya. Upon completion of the data collection process, the researcher organized the data based on the researcher objectives and the distinct respondent groups. The first group to be cleaned and coded was that for institutional heads followed by that of the multidisciplinary team and lastly that for special education teachers.

Since the study primarily focused on collecting qualitative data, the researcher utilized descriptive statistics in analyzing the data collected where more emphasis was placed on frequencies and percentages. For this reason, the output from the analysis process was in the form of tables, graphs and charts. Aside from the research objectives, other areas that were included in the analysis process include demographic information and response rate for the study.

#### 4.1 Demographic Information of teachers

**Table 4.1: Demographic Information of teachers**

Demographic information		Frequency (f)	Valid percentage (%)
<b>Gender</b>			
Male		10	38.5%
Female		16	61.5%
<b>Age</b>			
Below 30 years		3	11.5%
31-40 years		3	11.5%
41-50 years		20	77%
<b>Level of Education</b>			
Port Reitz	Secondary	0	0%
	Tertiary/College	3	50%
	Undergraduate	3	50%
Tom Mboya	Secondary	1	11.1%
	Tertiary/College	5	55.6%
	Undergraduate	3	33.3%
Tudor	Secondary	2	18.2%
	Tertiary/College	5	45.5%
	Undergraduate	4	36.3%
<b>Level of Experience</b>			
Less than 3 years		5	19.2%
3-6 years		8	30.8%
7-10 years		2	7.7%
Over 10 years		11	42.3%
<b>Received training</b>			
Yes	1-3 times	4	30.8%
	4-6 times	6	46.2%
	More than 6 times	3	23.0%
No		13	50%

In the first section, the study sought to investigate the demographic characteristics of respondents who participated in the study. Such included gender, age, level of education and level of experience. Findings of the study indicated that a larger proportion of the respondents were females 16 (61.5%) while male respondents were 10 (38.5%). For the independent variable age, most of the respondents were aged between 41 and 50 years 20 (77%) while the figure for those between 31 and 40 and below 30 years was the same at 3

(11.5%). The independent variable, level of education, the participants were divided according to the three respective schools where the study was undertaken. Tudor had the highest number of participants at 11 followed by Tom Mboya 9 while Port Reitz had the least at 6 participants. At Tudor school, a significant proportion of the participants 5(45.5%) had attained tertiary/college level of education followed by undergraduate level 4(36.3%) and the least at secondary level 2(18.2%). For Tom Mboya, most of the respondents 5(55.6%) had attained tertiary/college level education followed by those with undergraduate degree 3(33.3%). There was only one respondent 1(11.1%) with secondary level education. At Port Reitz, there were 3(50%) with tertiary level and also 3 with undergraduate level of education. There was no respondent with secondary as their highest level of education.

Regarding their independent variable level of experience, most of respondents 11(42.3%) had more than 10 years of experience teaching children with special needs. The second highest were with experience of between 3 and 6 years 8 (30.8%) followed by those with less than three years 5(19.2%). The least represented group consisted of those with level of experience from 7-10 years 2(7.7%).

Half of the respondents 13 (50%) had received training on special needs among whom 6 (46.2%) had received training lasting between 4 to 6 times followed by those ranging from 1 to 3 times 4 (30.8%). The ones who had received the most training over 6 times were 3 (23.0%).

## 4.2 Teaching Methods used in teaching Learners with Multiple Disabilities

The first objective for the study was to investigate the methods employed in teaching learners with multiple disabilities in Mombasa County. From the results, the identified techniques for teaching life skills education included collaborative activities such as singing, dancing, talking to the learners, discussion, demonstrations, non-verbal communication methods such as gestures, clues, participation in practical activities such as cooking, washing and cleaning, peer tutoring, observation and fun activities such as button and buttonholes board. In this objective, the special needs education teachers were expected to have used at least two teaching methods when teaching life skills to learners with multiple disabilities. The following table represents the responses that respondents gave during the study.

**Table 4.2: Variety of Methods in Teaching the Learners with Multiple Disabilities**

Teaching methods	Tom Mboya		Port Reitz		Tudor		Total
	f	%	f	%	f	%	
Collaborative activities	9	100%	5	83.3%	10	90.9%	24
Discussions	3	33.3%	1	16.7%	4	36.4%	8
Demonstrations	5	55.6%	4	66.7%	9	81.8%	18
Non-verbal communication measures	2	22.2%	3	50%	6	54.5%	11
Fun practical activities	7	77.8%	5	83.3%	10	90.9%	22
Skill enhancing activities e.g. washing observation	8	88.9%	4	66.7%	9	81.8%	21
	2	22.2%	2	33.3%	6	54.5%	10

The respondents employed a variety of methods in teaching the learners with multiple disabilities which included; collaborative activities, discussions, demonstrations, non-

verbal communication methods, fun practical activities, skill enhancement activities and observation. At Tom Mboya School, the most commonly employed teaching method was collaborative activities 9 (100%) followed by Skill enhancing activities e.g. washing 8 (88.9%) and Fun practical activities 7 (77.8%). On the other hand, at Port Reitz the most commonly employed teaching methods were collaborative activities and fun practical activities at tying at 5 (83.3%) followed by demonstrations and skill enhancing activities e.g. washing tying at 4 (66.7%). Collaborative activities and fun practical activities were the most employed 10 (90.9%) teaching methods at Tudor School followed by Skill enhancing activities e.g. washing 9 (81.8%). The least employed method was discussions 4 (36.4%).

From the table, it is evident that most of the respondents employed more than one method of teaching learners with multiple disabilities. However, it is worthy to note that some of them indicated that they used only one method to teach the learners. This finding is similar to that of a study carried out by Wanjiku (2014) where the results indicated that the integration of different teaching methods was rife in Kenya and that it was beneficial in facilitating the learning process among learners with multiple disabilities.

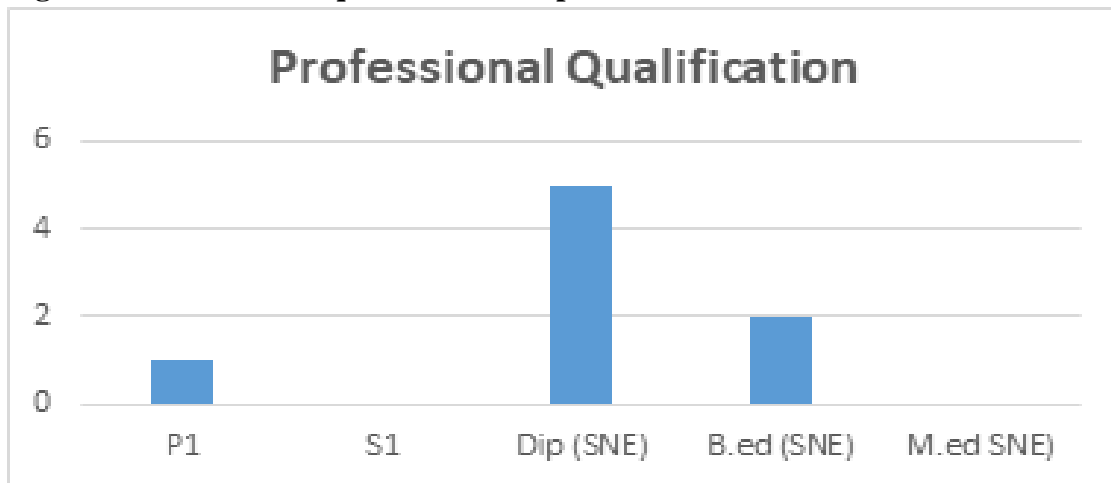
The finding also coincided with that of another study carried out by Mutisya (2010) in Rachuonyo District where it was evident that special needs education teachers employed a variety of teaching methods to facilitate the learning process. In his study, he found that the learning process among learners with multiple disabilities required the use of different methods that are tailored to mitigate the challenge resulting from their disability. From table 4.4, it is evident that some methods are less commonly used such as collaborative

activities, observation, skill enhancing activities such as washing and cleaning, and non-verbal communication measures such as the use of gestures and clues. Also, others that are more commonly used include demonstration and fun activities. Lack of integration of all the identified methods may be an indication of specialization among the teachers.

#### 4.3 Professional Qualification of Teachers teaching Life Skills Education

In the second objective, the researcher sought to investigate the educational qualification of special education teachers from the three schools in Mombasa County. To achieve this, the researcher asked the respondents to state their highest level of professional attainment in the questionnaires. The researcher listed the professional qualifications from P1, S1, diploma, bachelors and Masters Degrees in special needs education. The following column graph illustrates the findings of the study.

**Figure 4.1 Professional qualification of special needs education teachers**



The result of column graph 4.1 above indicates that a larger proportion of the respondents that is 5 has attained a diploma in special needs education. However, there were three others where two had attained an undergraduate degree while the other one had a P1 in

special needs education. The finding in this objective is similar to that in a study carried out by Anyango (2017) in Makadara sub-county, which found that the majority of the special needs education schools at primary level in the area comprised mainly teachers who were diploma holders.

#### **4.4 Role of the Multidisciplinary Personnel in Teaching Life Skills Education**

Every special needs school has a multidisciplinary team who collaborate in performing different tasks that facilitate the learning process of learners with multiple disabilities. In this third objective, the researcher sought to investigate the different roles performed by the team in the three schools. The following frequency distribution table gives an illustration of the findings.

**Table 4.3 : Roles of the Multidisciplinary Team**

<b>Schools</b>	<b>Roles</b>
Tudor	<ul style="list-style-type: none"> <li>● Assisting the learners in performing their day-to-day activities.</li> <li>● Guiding the learning processes in the school.</li> <li>● Monitoring and evaluation of school programs and projects</li> </ul>
Port Reitz	<ul style="list-style-type: none"> <li>● Assisting the learners in performing their day-to-day activities.</li> <li>● Formulating policies to guide the learning process in the school.</li> <li>● Following on school programs and other initiatives</li> </ul>
Tom Mboya	<ul style="list-style-type: none"> <li>● Handling issues regarding the learners</li> <li>● Assisting the learners in performing their day-to-day activities</li> <li>● Formulating policies to guide the learning process in the school.</li> </ul>

It is worth to note that only one respondent was selected from the three schools signifying that the above responses are of three respondents each from one school. From table 4.3, it

is evident that the multidisciplinary team has four core roles to play including handling issues partaking the learners, formulating policies to facilitate the learning process, assisting learners to undertake their day-to-day activities and monitoring and evaluation of institutional programs and initiatives.

The roles performed by the team are similar despite being from different schools, which may be an indication that the functions of the team may be formulated and stated by the government. The roles the team plays are crucial in facilitating the learning process since they provide the guidelines followed in administering the learning process. According to Jones, (2016), every special needs education institution has a multidisciplinary team, which acts as a policy-making body.

#### **4.5 Material Resources available in teaching Life Skills Education**

The core aim fourth objective was to investigate the resources available in the three learning institutions to facilitate teaching of life skills. To achieve this, the researcher focused on four aspects namely ICT infrastructure, teaching aids such as books and pictures, human resources such as teachers and learning facilities. The following table represents the findings of the study.

**Table 4.4 Resources Supporting Teaching of Life Skills to Learners**

<b>Respondents</b>	<b>ICT</b>	<b>Teaching aids</b>	<b>Human resources such as teachers and supportive staff</b>	<b>Learning facilities</b>
1 <sup>st</sup> respondent	√	√	√	√
2 <sup>nd</sup> respondent	√	√	√	√

From the responses of the two heads of institutions, it is evident that they have similar resources endowments in terms of the categories. The other commonality between the two is the problems they face with regard to resource endowment since they all complained on lack of adequate resources to support learning processes in the respective institutions. Some of the problems they faced include lack of enough teachers, facilities and funding to ensure effective learning. The finding is similar to that of Kiru (2018) who stated that lack of funding on the part of the government has been the biggest challenge to the provision of special education in Kenya that have contributed to secondary problems such as lack of facilities, lack of enough facilities and failure to enhance the abilities of teachers through training.

Mauya et al (2016) add that many of the special schools were established targeting a low number of students but failed to get the required support to expand when the student population increased thus leading to overcrowding. It is imperative to note that overcrowding is a serious problem in the administration of life skills since they hinder effective handling of learners with multiple disabilities. Overall, even though resources to support learning of life skills are available, they are inadequate to achieve optimal learning.

### **Thematic Analysis**

The head teachers were asked several questions regarding the teachers and available professional development programs in the institutions. In such cases, the first section focused on the types of in-service training the teachers were undergoing in the selected schools; the findings showed that the recurring themes included knowledge-based,

leadership-based, and teaching method-based in-service training whose duration varied according to the teaching levels. Moreover, the three head teachers took their teachers from training at least once a term signifying that the educators underwent the program three times a year. Conversely, results from the thematic analysis regarding the impact of training on the quality of teaching focused on three codes/themes; improved, remained the same, and decreased. The findings showed that teachers who underwent in-service training reported improved quality of teaching among the three schools. In such a case, quality measurements indicated were performance and behavioral improvement among the learners, teacher commitment to their work, and changes/improvements in teaching methods adopted among the teachers.

#### **4.6 Conclusion**

This chapter includes data presentation, analysis of results and discussion on the analyzed results. It begins with an introduction of what the chapter entails. It gives a presentation of the demographic information that is given in the bio data of the questionnaires. It gives an analysis of results of the data according to the objective of this study. The next chapter gives a summary, conclusion and recommendation.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.0 Introduction

The aim of the study was to examine the implementation factors of teaching life skills education to learners with multiple disabilities in special schools in Mombasa County, Kenya. To achieve this, the study was guided by four specific objectives namely to examine the extent to which teaching methods are used by teachers in teaching learners with multiple disabilities life skills education, to establish the extent to which professional qualification of teachers affects the methods used when teaching learners with multiple disabilities life skills education, to establish the roles played by multidisciplinary personnel in teaching learners with multiple disabilities life skills education and to assess the availability and the use of resource materials designed for use in teaching learners with multiple disabilities in life skills education.

Therefore, this study focused on highlighting a summary of the findings, the researcher's conclusions, recommendations together with areas suggested for further studies to mitigate the areas where this study had limitations. Questionnaires were administered to three groups of respondents namely the heads of institutions, members of the multidisciplinary team and special needs education teachers. The data collected was then analyzed and presented in terms of tables, graphs and charts based on the research objectives.

## **5.1 Summary of the Findings**

The researcher summarized the findings based on the objectives of the study. From the findings, it is evident that special needs education teachers employed a variety of methods to teach life skills education to learners with multiple disabilities. The most commonly utilized methods included engaging the learners in collaborative activities, demonstrations, discussions and practical fun activities for motivating learners to concentrate during the learning process. Nonetheless, the findings also indicated that there are some teaching methods that were least common including non-verbal communication techniques, skill-enhancing activities such as cooking and washing, and observation methods. Furthermore, the teachers employed more than one method of teaching in administering life skills education to learners with multiple disabilities to enhance the learning process.

During the study, the researcher also sought to find out the professional qualification of special needs education teachers who were included in the study. Here, it was evident that a larger proportion of them had obtained a diploma in special needs education while the remaining were divided between those with a bachelor's degree and those with P1 qualification. There was neither a teacher with bachelor's degree nor S1 qualification during the study. The finding indicates that most of the special needs education teachers preferred having diploma qualification. However, it is imperative to note that all the 6 out of the 8 special needs education teachers in the study had professional qualification with at least a diploma in special needs education representing 75% of the total number of teachers. The other 2 representing 25% were untrained teachers employed by the board of

management of the respective schools. Each of the three schools had a multidisciplinary team established to perform different roles within the institutions, some of these roles included assisting learners with multiple disabilities to engage in different activities that define their daily life, formulating institutional policies, monitoring and evaluation of the implementation process of school programs and initiatives and handling learners' issues. It is worth noting that some of the roles of the personnel were similar despite being in different schools signifying the existence of similar issues that these institutions face especially teachers when teaching special needs education. In addition, the multidisciplinary team comprised individuals from diverse positions including special needs education teachers, assistive staff, the management, surrounding community and other stakeholders. The decisions with the approval of the respective heads of institutions guided the learning process since they aimed to solve arising issues.

Optimal functioning of every institution requires the availability of adequate and required resources. In this study, the identified resources included ICT infrastructure, human resources such as special needs education teachers, teaching aids such as books and learning facilities such as classrooms for teaching life skills education. From the two schools that returned questionnaires, it was evident that they shared similar facilities, which are standard to all special needs schools in Kenya. Even though the schools had supportive resources, the head teachers stated that they were not enough to cater for the growing needs of learners with multiple disabilities owing to their numbers and obsolescence. According to them, the inadequate facilities, especially additional classrooms and supportive equipment hindered teaching of special needs education to the

learners since some of them required special equipment and enough space to achieve effective learning.

The findings also revealed that the effectiveness of the teaching methods was hindered by the existence of challenges that primarily revolved around poor funding of special needs education by the government in Kenya in general. Nonetheless, despite the prevailing challenges, the special needs education teachers were able to administer life skills education to the learners by employing a combination of methods to achieve effectiveness.

## **5.2 Conclusions**

Teaching methods used by special needs teachers in Mombasa County are to some extent effective in teaching life skills education to learners with multiple disabilities. The assertion is because employing a combination of different methods facilitates the learning process especially for this kind of learners. The teachers employ the different teaching methods differentially indicating that some of them may have specialized to teach learners with specific disabilities, which in most cases range from 2 and above. Some of them use specific methods based on convenience or ability to achieve effective learning when teaching life skills education.

Teachers had varied levels of professional qualifications that included P1, Diploma and Bachelor's degree in special needs education. The fact that most of them possessed Diploma in special needs education indicates that it is the level when teachers specialize unlike those in P1. In addition, few preferred to further their education since there was

only one teacher with a Bachelor's degree in special needs education with none of them having postgraduate level education.

Multidisciplinary personnel play a critical role in the optimal functioning and learning in special needs schools in Mombasa County. The core functions that apply to all the three schools in the county are providing necessary assistance to learners to provide them with ample time for learning, formulation of policies to guide the learning process in the school and as monitoring and evaluation personnel for institutional programs and other initiatives. The roles of the multidisciplinary personnel are similar in all the three schools, which may be an indication that the three schools are facing similar issues.

The three schools have similar resource endowment. Such resources include facilities, human resources, Information Communication Technology Infrastructure and teaching aids such as books and other materials. The three schools heavily rely on these resources to provide learners with multiple disabilities with life skills education. The biggest challenge identified in this case is that the resources are not adequate to facilitate the learning process.

On that note, it is important that there was a need to undertake an in-depth examination of the methods used in teaching life skills education to learners with multiple disabilities in special schools in Mombasa County. All stakeholders involved in special needs education in the county should take the initiative to ensure adoption of teaching methods that promote optimal learning.

In-service training is critical in improving teachers' knowledge and skills which translate to performance and behavioral changes among the learners. The program boosts professional commitment and dedication amongst the educators signifying that it should remain part of life skills curriculum for schools, targeting the teachers.

### **5.3 Recommendations**

Based on the results of this study, various teaching methods used in teaching life skills education were examined. Therefore, the researcher recommends the following.

- Adequate funding of special needs education in Mombasa County to facilitate the provision of learners with life skills education. The funding should be used in areas such as expansion of classrooms, recruitment of more teachers and provision of learners with supportive equipment to support learners with multiple disabilities.
- Institutional heads should learn about the different teaching methods used by special needs education teachers in teaching life skills education to understand and formulate measures to support the teaching methods.
- There is a need for the government to take a leading role in supporting special needs education in institutions of higher learning together with undertaking and evaluating to identify the shortages of teachers and then sending the teachers to fill the gap. The ministry of education should specify the minimum qualifications that special needs education teachers should have to qualify for government employment.
- There is a need to employ an integrative approach in the teaching methods used in teaching life skills education to facilitate learning process among learners with multiple disabilities for instance involving the community and full engagement of the multidisciplinary team to guide the learning process.

#### **5.4 Areas for further Research**

1. Since the study had its limitations, the researcher suggests that further studies be conducted in the following areas to increase the pool of information regarding teaching methods in special needs education used in teaching life skills education.
2. Effective ways of integrating Information Communication Technology in the administration of different methods used in teaching life skills to learners with multiple disabilities in Mombasa County.
3. Measures to mitigate the impact of limited resources in special schools in Mombasa County, Kenya.
4. Studies should also be carried out to investigate the challenges involved in teaching life skills education to learners with multiple disabilities in special schools in Kenya.
5. The role of community as primary stakeholders in the provision of life skills education to learners with multiple disabilities in Mombasa County, Kenya.

## REFERENCES

- Anyango, O. M. (2017). *School-Based Factors Influencing Implementation of Inclusive Education In Public Secondary Schools In Makadara Sub County, Kenya* (Doctoral Dissertation, University Of Nairobi).
- Berends, M. (2006). Survey research. In Green, J.L., Camilli, G., & Elmore, P.B. (Eds.), *Hand Book of Complementary Methods in Education Research* (pp. 623). Mahwah, New Jersey, USA: Lawrence Erlbaum
- Best, S.J., Heller, K.W., & Bigge, J.L. (2010). *Teaching Individuals with Physical or Multiple Disabilities* (6<sup>th</sup> Ed.). Upper Saddle River, New Jersey, USA: Pearson education Inc.
- Briggs, R.J., Coleman, M & Morrison, M. (2012). *Research Design*. Sage publications
- Browder, D.M. and Spooner, F (2011). *Teaching students with moderate and severe disabilities*. New York, NY: the Guilford press
- Bryman, A. (2008). *Social Research Methods* (3<sup>rd</sup> Ed.). Oxford: oxford press
- Chitiyo, M., Odongo, G., Itimu-Phiri, A., Muwana, F., & L Ipemba, M. (2015). Special education teacher preparation in Kenya, Malawi, Zambia, and Zimbabwe. *Journal of International Special Needs Education*, 18(2), 51-59.
- Eshiwani, G.S. (1993). *Education in Kenya*. East African Educational Publishers
- Farrell, A. (2009). *Foundations Of Special Education: An Introduction*. UK: John Wiley and sons, ltd
- Fincham, J. E. (2008). Response rates and responsiveness for surveys, standards, and the Journal. *American journal of pharmaceutical education*, 72(2), 43.
- Forlin, C (2012). *Future directions for inclusive teacher education: an international perspective*. Edited by Chris Forlin. Routledge
- Fraenkel, J.R. & Wallen, N.E. (2012). *How to Design and Evaluate Research in Education*. Mc Grail hill
- Gargiulo, R.M. (2019). *Special Education in Contemporary Society: An Introduction to Exceptionality* (6<sup>th</sup> Ed.). Sage publication
- Goel, A. & Goel, S.L. (2005). *Human values and education*. New Delhi, India: Deep and Deep Publication Pty Ltd

- Jones, B. R. (2016). Parents' perceptions of school multidisciplinary team meetings and collaboration.
- Kavulya, J. (2007). *How to Write Research and Term Papers*. Nairobi: Jomo Kenyatta foundation
- Kelin Kenya (2010). *Life Skills education in Kenya: a comparative analysis and stakeholders perspective*
- Kiru, E. W. (2018). Special Education in Kenya. *Intervention in School and Clinic*, 1053451218767919.
- Klein, S.B. (2018). *Learning Principles and Applications* (11th Ed.). USA: McGraw hill, Inc
- Kryszewska, H. (2017). Teaching Students with Special Needs in Inclusive Classrooms Special Educational Needs.
- Lankershear, C. & Knobel, M. (2004). *A Handbook for Teacher Research from Design to Implementation*. Open University press, Mc. Graw – hill education
- Maag, J.W. (2016). *Behavior Management from Theoretical Implications to Practical Applications*. Wardsworth, a division of Thomson learning
- Mattingly, J and Subi, P (2016). *A study on children with disabilities and their right to education: republic of Rwanda*. Berkshire: education development trust
- Mauya, B. K., Wekesa, N., Chabra, S. C., Thairu, H. M., Oundo, J. O., Muli, F., ... & Kokwaro, G. O. (2016). *School Based Barriers Affecting Academic Performance of Learners With Learning Disabilities in Regular Schools in Eastern Zone of Nakuru Municipality, Nakuru County, Kenya* (Doctoral dissertation, Kenyatta University).
- Mugo, J.K., Oranga, J and Singal, N. (2010). Testing youth transitions in Kenya: are young people with disabilities falling through the cracks? Working paper no.34. Research consortium on educational outcomes and poverty
- Ndururumo, M.M. (1993). *Exceptional Children –Development Consequences and Intervention*. Longhorn publishers (k) ltd
- Olio, D. & Jeanine, M. (2007). *Models of Teaching with Standards*. California, USA: MSage publication, Inc.
- Omamo, M.O. (2017). *School based factors influencing implementation of inclusive education in public secondary schools in makadara sub county, Kenya* (Masters project, University of Nairobi)

Smith, H.P. (1962). *Psychology in teaching* (2<sup>nd</sup> Ed.) Prentice hill Inc

Wang'ang'a, A.R.W (2014). *Teaching Strategies Used By Teachers To Enhance Learning To Learners With Multiple Disabilities In Four Selected Counties In Kenya* (Doctoral dissertation, Kenyatta University).

### INTERNET SOURCES

Asia pacific disability rehabilitation journal: Japanese society for rehabilitation of persons with disabilities (JSRDP) 2007-2015 retrieved from [www.dinf.ne.jp/doc/english/asia/resource/apdrij/z13jo0300/z13jo00304.html](http://www.dinf.ne.jp/doc/english/asia/resource/apdrij/z13jo0300/z13jo00304.html)

Ayre, K.M, Mechlin, L and Sansoti, F.J. (2013) *the use of mobile technologies to assist with life skills/ independence of student with moderate/severe intellectual disability and autism spectrum disorders: consideration for the future of school psychology* retrieved from <https://onlinelibrary.wiley.com/doi/full/10.1002/pits.21673>

Drame, E.R. and Kampoff, K (2014). Perceptions of disability and access to inclusive education in West Africa: a comparative case study in Dakar, Senegal. International journal of special education vol.29 no.3, 2014 retrieved from [researchgate.net/publication/280624676\\_Perceptions\\_of\\_disability\\_and\\_access\\_to\\_inclusive\\_education\\_in\\_west\\_africa\\_a\\_comparative\\_case\\_study\\_in\\_dakar\\_senegal](http://researchgate.net/publication/280624676_Perceptions_of_disability_and_access_to_inclusive_education_in_west_africa_a_comparative_case_study_in_dakar_senegal)

Four purposes of PL94-142 US department of education. (n.d) retrieved from [www2.ed.gov/..index\\_pg10htm](http://www2.ed.gov/..index_pg10htm)

Inclusion of people with disabilities in Kenya. (2009) (n.d) [www.ilo.org/wcmsps5/groups/public/@ed\\_emp/@ifp\\_skills/documents/publication/wcms\\_115097.pdf](http://www.ilo.org/wcmsps5/groups/public/@ed_emp/@ifp_skills/documents/publication/wcms_115097.pdf)

Kothar, C.R. (2004). *Research Methodology: Methods and Techniques* (3<sup>rd</sup> ed.). New Age International, India retrieved from [www.modares.ac.ir/uploads/Agr.Oth.Lib17.pdf](http://www.modares.ac.ir/uploads/Agr.Oth.Lib17.pdf)

- Kenya coast province –Mombasa – informal settlements- monitoring the situation of the children and women 2010 retrieved from <https://reliefweb.int/sites/files/resources/mic54-kenya-finalreport-2009> E...
- Life skills education in Kenya (Kenya institute of education) (n.d) retrieved from [wikieducator.org/life\\_skills\\_Education/\(Kenya –institute of-education\)](http://wikieducator.org/life_skills_Education/(Kenya-institute-of-education))
- Life skills education in Kenya: a comparative analysis and stake holders perspectives (2010) (n.d) retrieved from [www.fhi360.org/sites/default/files/media/documents/life%70skills20%education%20Kenya-reportpdf](http://www.fhi360.org/sites/default/files/media/documents/life%70skills20%education%20Kenya-reportpdf)
- Macmillan dictionary retrieved from <http://www.macmillandictionary.com>
- Ministry of education, sector policy for learners and trainees with disabilities, may 2018  
Retrieved from [planipolis.iiep.unesco.org/sites/planipolis/files/resources/kenya\\_sector\\_policy\\_learners\\_trainees\\_disabilities\\_pdf](http://planipolis.iiep.unesco.org/sites/planipolis/files/resources/kenya_sector_policy_learners_trainees_disabilities_pdf)
- Mutisya, C. M. S. (2010). Factors influencing inclusion of learners with special needs in regular primary schools in Rachuonyo District, Kenya. *Unpublished Thesis*. Kenyatta University. Jones, T.J.(1998)WHO Global school initiative retrieved from [http://www.who.int/school\\_youth\\_thhealth/media/en/92pdf](http://www.who.int/school_youth_thhealth/media/en/92pdf)
- My child retrieved from <http://www.cerebralpalsy.org/information/lifeskills>
- Program on mental health (1997) Life skills education in schools retrieved from [www.asksource.info/pdf/31181\\_lifeskillsed\\_1994pdf](http://www.asksource.info/pdf/31181_lifeskillsed_1994pdf)
- Special needs technology assessment resource support team (n.d) (1996) Meeting the needs of students with severe and or multiple disabilities retrieved from [www.nsnet.org/start/severe.pdf](http://www.nsnet.org/start/severe.pdf).
- Stone-Macdonald, A. (2013). Learning daily life and vocational skills in natural settings: a Tanzanian model. The journal of the international association of special education, thirteenth biennial conference, Vancouver, British Columbia 7<sup>th</sup> -11<sup>th</sup> July 2013 retrieved from <https://www.iase.org/JIASE%202012.pdf#page=28>
- Tesemma, S.T. (2011). Educating children with disabilities in Africa: towards a policy of inclusion. Addis Ababa: the African policy forum ACPF (2011) retrieved from <https://www.eenet.org.uk/resources/docs/6519.pdf>
- UNICEF, 2011, The Rights of Children with Disabilities to Education: A Rights Based Approach to Inclusive Education: UNICEF Regional Office for Central and Eastern Europe and the Commonwealth of Independent States (CEECEIS) (n.d) retrieved from [http://www.unicef.org/ceecis/background\\_NoteFINAL\(1\).pdf](http://www.unicef.org/ceecis/background_NoteFINAL(1).pdf)

Wood, J., Antonowicz, L., Clarke, D., Daniel, P., Grout-smith, J., Tanner, S., Tibbits, F., and Wang'ati, M. (2012) Global life skills education evaluation - UNICEF retrieved from [www.unicef.org/evaluation/files/GLSE\\_phase\\_2\\_Final\\_report\\_march2012\\_revised.pdf](http://www.unicef.org/evaluation/files/GLSE_phase_2_Final_report_march2012_revised.pdf)

## APPENDICES

### APPENDIX 1

#### PERMISSION LETTER TO CONDUCT RESEARCH

P.O Box 18857-00500  
NAIROBI  
14<sup>th</sup> October 2018

COUNTY COMMISSIONER  
MOMBASA COUNTY  
MOMBASA

Dear Sir/Madam,

**RE: PERMISSION TO CONDUCT RESEARCH**

I would like to ask for permission to conduct research in four special schools in Mombasa County. I am a student at Kenyatta University in the school of education, masters of education (special needs education). I am currently working on my thesis. The location of my study is in Mombasa County. I would like to collect data for my research from Port Reitz Special School, Tom Mboya School for the Cerebral Palsied, Mombasa Secondary School for the Physical Handicapped and Tudor Special School. I have submitted my request to NACOSTI and I have been issued with a license to conduct the study. I also have a copy of approval to collect data from these schools. I am currently based in Nairobi. I will use questionnaires and interview schedules. The choice of these methods of collecting was informed with the fact that I am in full time employment. I have a research assistant who will assist in collecting the data. He is a student at Pwani University. He is James Mbaji Katakwa admission number EBO1/PU/40782/16 a third year student studying bachelor of education (arts). Any assistance given to me will be highly appreciated.

Yours sincerely

Phoebe Inyanji Lebanon – 0717789380

**APPENDIX 2**  
**LETTER OF INTRODUCTION**

P.O BO18857  
NAIROBI  
14<sup>th</sup> October 2018

THE HEADTEACHER  
PORT REITZ SPECIAL SCHOOL  
MOMBASA

Dear sir/madam,

**RE: CONSENT TO CONDUCT A STUDY IN YOUR SCHOOL**

I would like to request for your consent to participate in this study. I am a masters' student from Kenyatta University in the school of education and the department of special needs education. I am conducting research on life skills education specifically to learners with multiple disabilities. I will require information from all the participants. All the information given will be handled with confidentiality and no disclosure of names of those participating in this study. Please answer the questionnaire and interview as honestly as possible. I started this research when I was still working in Kilifi. However, I later relocated to Nairobi. That is why I chose to use questionnaires and interview schedules as my method of collecting data. I am in full time employment. I am sending my research assistant to collect my data from your institution. He is a student at Pwani University. He is James Mbaji Katakwa a student at Pwani University, admission EBO1/PU/40782/16, a third year student studying bachelor of education (arts). Any assistance shall be highly appreciated.

Yours sincerely

Phoebe Inyanji Lebanon – 0717789380

**APPENDIX 3**  
**CONSENT LETTER TO HEADTEACHER TUDOR SPECIAL  
SCHOOL**

P.O BO18857  
NAIROBI  
14<sup>th</sup> October, 2018

THE HEADTEACHER  
TUDOR SPECIAL SCHOOL  
P.O BOX  
MOMBASA

Dear sir/madam,

**RE: CONSENT TO CONDUCT A STUDY IN YOUR SCHOOL**

I would like to request for your consent to participate in this study. I am a masters' student from Kenyatta University in the school of education and the department of special needs education. I am conducting research on life skills education specifically to learners with multiple disabilities. I will require information from all the participants. All the information given will be handled with confidentiality and no disclosure of names of those participating in this study. Please answer the questionnaire and interview as honestly as possible. I started this research when I was still working in Kilifi. However, I later relocated to Nairobi. That is why I chose to use questionnaires and interview schedules as my method of collecting data. I am in full time employment. I am sending my research assistant to collect my data from your institution. He is a student at Pwani University. He is James Mbaji Katakwa a student at Pwani University, admission EBO1/PU/40782/16, a third year student studying bachelor of education (arts). Any assistance shall be highly appreciated. Thank you.

Yours sincerely

Phoebe Inyanji Lebanon – 0717789380

## APPENDIX 4

### CONSENT LETTER TO THE HEADTEACHER TOM MBOYA SCHOOL FOR CEREBRAL PALSY

P.O BO18857

NAIROBI

14<sup>th</sup> October 2018

THE HEADTEACHER

TOM MBOYA SCHOOL FOR THE CEREBRAL PALSY

P.O BOX

MOMBASA

Dear sir/madam,

#### **RE: CONSENT TO CONDUCT A STUDY IN YOUR SCHOOL**

I would like to request for your consent to participate in this study. I am a masters' student from Kenyatta University in the school of education and the department of special needs education. I am conducting research on life skills education specifically to learners with multiple disabilities. I will require information from all the participants. All the information given will be handled with confidentiality and no disclosure of names of those participating in this study. Please answer the questionnaire and interview as honestly as possible. I started this research when I was still working in Kilifi. However, I later relocated to Nairobi. That is why I chose to use questionnaires and interview schedules as my method of collecting data. I am in full time employment. I am sending my research assistant to collect my data from your institution. He is a student at Pwani University. He is James Mbaji Katakwa a student at Pwani University, admission EBO1/PU/40782/16, a third year student studying bachelor of education (arts). Any assistance shall be highly appreciated.

Yours sincerely

Phoebe Inyanji Lebanon – 0717789380

## APPENDIX 5

### QUESTIONNAIRE TO SPECIAL NEEDS EDUCATION TEACHERS

Dear sir/ madam,

My name is Phoebe Inyanji Lebanon, masters of education degree student in the department of special needs education, Kenyatta University. The purpose of the study is to examine the methods used to teach life skills education to learners with multiple disabilities in special schools in Mombasa County, Kenya. The information obtained will be treated with great confidence. Please answer all questions tick in the boxes and give explanations where necessary.

#### BIODATA

1) Gender

Male ( ) Female ( )

2) Age: age 30 years and below ( ) 31-40 ( ) 41- 50 ( ) above 60 ( )

3) Highest education level

(a) Primary level ( )

(b) Secondary level ( )

(c) Tertiary ( )

(d) Undergraduate ( )

(e) Postgraduate ( )

(f) Others specify ( )

4) Highest professional qualification

P1 ( ) S1 ( ) Dip (SNE)( ) B.ed (SNE) ( ) M.ed ( )

Others please specify \_\_\_\_\_

5) Experience in teaching learners with multiple disabilities life skills education

- (a) Less than 3 years ( )
- (b) 3-6 ( )
- (c) 7-10 ( )
- (d) Over 10 years ( )
- (e) None ( )

**PART A**

1. In your opinion, does the qualification of a teacher influence the quality of teaching life skills?

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2. If yes, how does it influence the quality of teaching life skills?

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3. Have you been given in-service training for teaching life skills education to learners with multiple disabilities? (Please indicate YES/NO) \_\_\_\_\_

4. How many times? \_\_\_\_\_

Do you feel that more training is needed \_\_\_\_\_

5. In which area of life skills education do you feel you need training?

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**PART B**

1. Is there a school program for teaching life skills to learners with multiple disabilities in your school? \_\_\_\_\_

2. If yes, when did it begin? \_\_\_\_\_

3. How would you rate the teaching of life skills in your school / institution?  
Excellent (b) satisfactory (c) good (d) poor

4. What is the age of learners in the program?  
10-15

16-20

21-25

5. What are the methods that you use to teach life skills to learners with multiple disabilities?

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6. What are the challenges of teaching life skills to learners with multiple disabilities?

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7. What adjustments do you make when teaching life skills to these learners?

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8. Which methods of communication do you use in teaching life skills education to learners with multiple disabilities?

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**PART C**

1. Which members of the multidisciplinary team do you work with in teaching life skills to learners with multiple disabilities?

- |                        |                          |                  |                          |
|------------------------|--------------------------|------------------|--------------------------|
| Physiotherapist        | <input type="checkbox"/> | Speech Therapist | <input type="checkbox"/> |
| Occupational Therapist | <input type="checkbox"/> | Social Worker    | <input type="checkbox"/> |
| School Nurse           | <input type="checkbox"/> | Teacher Aide     | <input type="checkbox"/> |
| Nutritionist           | <input type="checkbox"/> | Pediatrician     | <input type="checkbox"/> |

2. State any other not mentioned above \_\_\_\_\_

3. In which ways does the multidisciplinary team assist in the teaching of life skills education to learners with multiple disabilities?

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4. How available are multidisciplinary team members in your institution

- (a) Very often
- (b) Often
- (c) Sometimes
- (d) Seldom
- (e) Never

5. How often do you meet with the team for consultations?

- (a) Very often
- (b) Often
- (c) Sometimes
- (d) Seldom
- (e) Never

6. How competent are the Para-professionals/assistants in assisting with teaching of multidisciplinary team?

( a) Excellent (b) satisfactory (c) good (d) poor

7. I have the necessary skills to teach life skills to learners with multiple disabilities.

Strongly agree	agree	undecided	disagree	strongly disagree
(5)	(4)	(3)	(2)	(1)

8. Give recommendations on how the instruction of life skills can be improved.

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**PART D**

*Please tick appropriately*

9. The current learning outcomes of life skills education are adequate as per the goals of the curriculum

Strongly agree	agree	undecided	disagree	strongly disagree
(5)	(4)	(3)	(2)	(1)

10. The current life skills education curriculum meets the specific individual needs of the learner

Strongly agree	agree	undecided	disagree	strongly disagree
(5)	(4)	(3)	(2)	(1)

11. The curriculum takes into account cultural back ground, community resources and students' disabilities.

Strongly agree	agree	undecided	disagree	strongly disagree
(5)	(4)	(3)	(2)	(1)

12. The text books for teaching life skills education adequately cover the topics

Strongly agree	agree	undecided	disagree	strongly disagree
(5)	(4)	(3)	(2)	(1)

13. The use of ICT in teaching life skills education is accessible

Strongly agree	agree	undecided	disagree	strongly disagree
(5)	(4)	(3)	(2)	(1)

14. The learners relate to the illustrations in text books.

Strongly agree	agree	undecided	disagree	strongly disagree
(5)	(4)	(3)	(2)	(1)

15. There is adequate teaching material in school for teaching life skills education to learners with multiple disabilities.

Strongly agree	agree	undecided	disagree	strongly disagree
(5)	(4)	(3)	(2)	(1)

16. Please give recommendations on what schools can do to enhance the teaching of life skills

## APPENDIX 6

### INTERVIEW SCHEDULE FOR HEAD OF INSTITUTION

Dear sir/ madam,

My name is phoebe Inyanji Lebanon a masters of education degree student in the department of special needs education, Kenyatta University. The purpose of the study is to examine the methods used to teach life skills education to learners with multiple disabilities in special schools in Mombasa County, Kenya. The information obtained will be treated with great confidence. Please answer all questions tick in the boxes and give explanations where necessary.

#### **PART A**

1. How many teachers in your institution teach learners with multiple disability life skill education?
2. What numbers of teachers are trained in special needs education and at what levels of education?
3. Are there any untrained teachers in your school?
4. Which age group of the learners is in the program?
5. Which kind of in service training is given to teachers teaching life skills in your institution?
6. When does this training take place?
7. Is the frequency of training enough?
8. What are you suggestions concerning the training of teachers in life skills education?
9. How is the teaching of life skills evaluated in your institution?

#### **PART B**

1. How effective are the available support materials in teaching.
2. What accommodations are available in your institution for teaching life skills to learners with multiple disabilities?
3. How would you rate the teaching of life skills in your institution?  
Excellent (b) satisfactory (c) good (d) poor

**PART C**

1. Which members of the multidisciplinary team are attached to your institution?

- |                        |                          |                          |                  |
|------------------------|--------------------------|--------------------------|------------------|
| Physiotherapist        | <input type="checkbox"/> | <input type="checkbox"/> | Speech Therapist |
| Occupational Therapist | <input type="checkbox"/> | <input type="checkbox"/> | Social Worker    |
| School Nurse           | <input type="checkbox"/> | <input type="checkbox"/> | Teacher Aide     |
| Nutritionist           | <input type="checkbox"/> | <input type="checkbox"/> | Pediatrician     |

2. Which areas of teaching life skills have been improved due to the involvement of the multidisciplinary team?

3. How often are meetings held with the team for consultations?

- (a) Very often
- (b) Often
- (c) Sometimes
- (d) Seldom
- (e) Never

4. How competent are paraprofessionals in assisting with teaching of life skill education?

5. Is there adequate information about life skills education in your institution?

6. What are your suggestions in improving the teaching of life skills in your institution?

**PART D**

*Please tick appropriately*

The current learning outcomes of life skills education are adequate as per the goals of the curriculum

- |                |       |           |          |                   |
|----------------|-------|-----------|----------|-------------------|
| Strongly agree | agree | undecided | disagree | strongly disagree |
| (5)            | (4)   | (3)       | (2)      | (1)               |

The current life skills curriculum meets the specific individual needs of the learner

- |                |       |           |          |                   |
|----------------|-------|-----------|----------|-------------------|
| Strongly agree | agree | undecided | disagree | strongly disagree |
| (5)            | (4)   | (3)       | (2)      | (1)               |

The curriculum takes into account cultural back ground, community resources and family values of the learner

Strongly agree	agree	undecided	disagree	strongly disagree
(5)	(4)	(3)	(2)	(1)

The text books adequately cover the topics in life skills education

Strongly agree	agree	undecided	disagree	strongly disagree
(5)	(4)	(3)	(2)	(1)

The use of ICT in teaching life skills is accessible

Strongly agree	agree	undecided	disagree	strongly disagree
(5)	(4)	(3)	(2)	(1)

The illustrations in text books for teaching life skills education show learners with multiple disabilities

Strongly agree	agree	undecided	disagree	strongly disagree
(5)	(4)	(3)	(2)	(1)

There is adequate teaching media for teaching learners with multiple disabilities in your school.

Strongly agree	agree	undecided	disagree	strongly disagree
(5)	(4)	(3)	(2)	(1)

## APPENDIX 7

### QUESTIONNAIRE FOR MULTIDISCIPLINARY TEAM

Dear sir/ madam,

My name is phoebe Inyanji Lebanon a masters of education degree student in the department of special needs education, Kenyatta University. The purpose of the study is to examine the methods used to teach life skills education to learners with multiple disabilities in special schools in Mombasa County, Kenya. The information obtained will be treated with great confidence. Please answer all questions tick in the boxes and give explanations where necessary.

#### PART A

1. State area of specialization

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2. What is your participation in in-service training of teachers?

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3. Is the frequency of training enough?

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4. If not, give suggestions

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5. How do you rate the impact of the multidisciplinary team in the quality of teaching life skills education?

6. ( a) Excellent (b) satisfactory (c) good (d) poor



**PART C**

1. In which area of teaching has there been an improvement due to the input of the multidisciplinary team

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2. How often do you have meetings with teachers and the head teacher for consultations?

- (a) Very often
- (b) Often
- (c) Sometimes
- (d) Seldom
- (e) Never

3. How do you rate the competence of para-professionals in assisting with teaching of life skills?

- (a)Excellent (b) satisfactory (c) good (d) poor

4. How do you assist in providing information life skills education your institution

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5. What are your suggestions concerning access to adequate information in the institution you serve?

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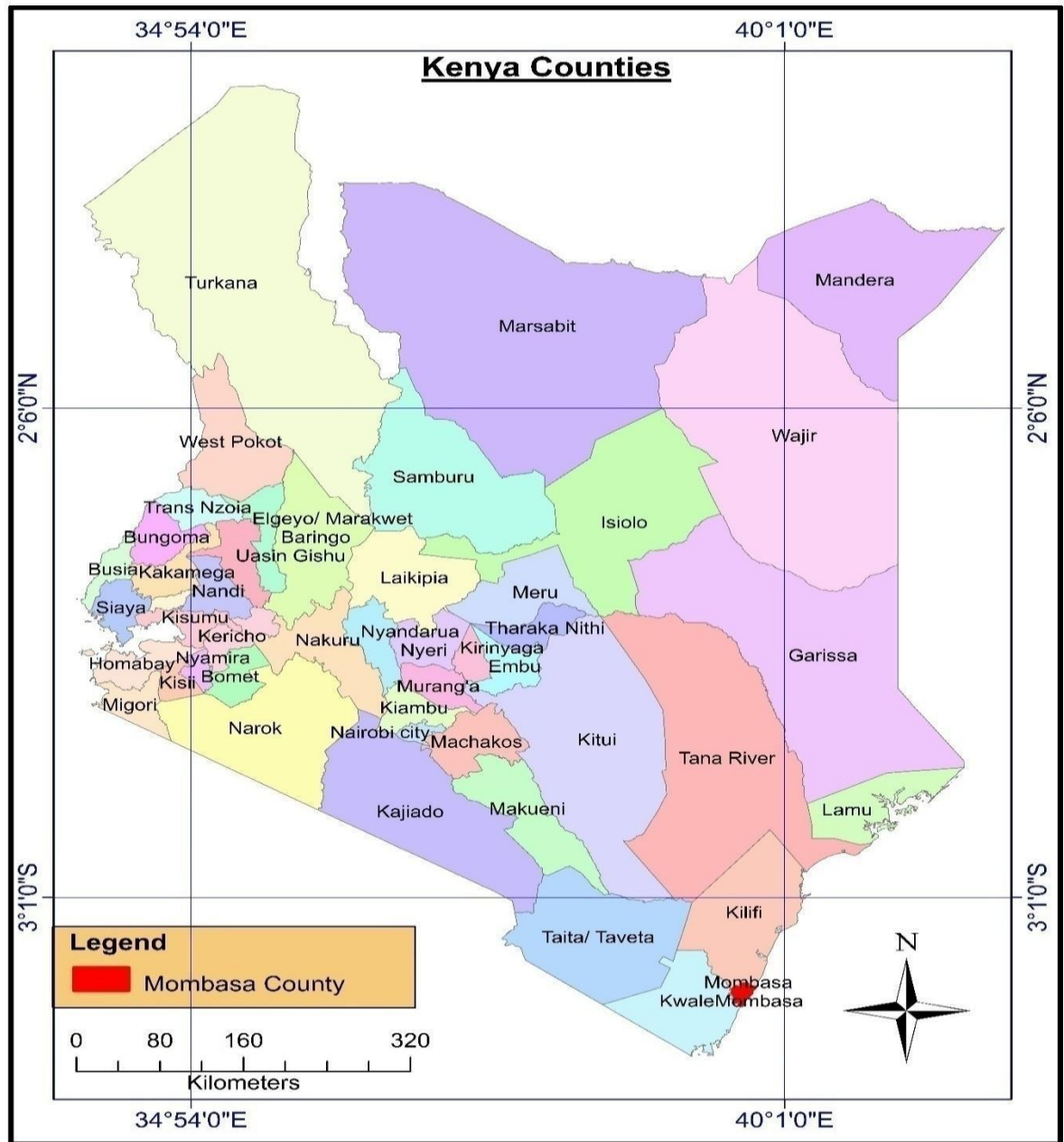
**PART D**

Please give suggestions on how schools can help you give better services on teaching life skills

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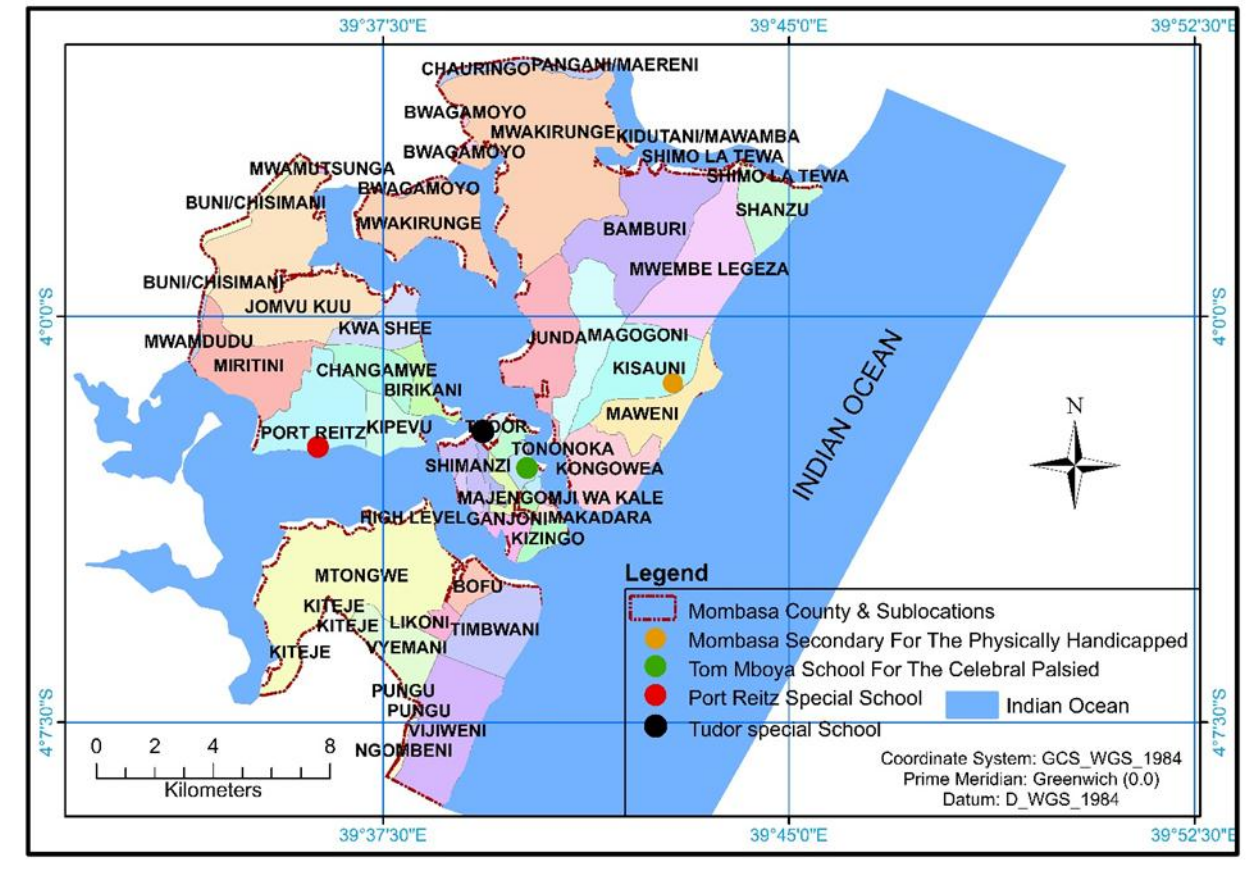
# APPENDIX 8

## MAP OF KENYA



## APPENDIX 9

### LOCATION OF RELEVANT SCHOOLS OF STUDY IN MOMBASA COUNTY



Source: Map Created by Ressa Kombi

## APPENDIX 10

### GRADUATE SCHOOL LETTER



KENYATTA UNIVERSITY  
GRADUATE SCHOOL

E-mail: [dean-graduate@ku.ac.ke](mailto:dean-graduate@ku.ac.ke)

P.O. Box 43844, 00100

NAIROBI, KENYA

Website: [www.ku.ac.ke](http://www.ku.ac.ke)

Tel. 020-8704150

Internal Memo

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FROM: Dean, Graduate School

DATE: 17<sup>th</sup> August, 2018

TO: Phoebe I. Lebanon  
C/o Special Needs Education Department

REF: E55/CE/22885/2011

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SUBJECT: APPROVAL OF RESEARCH PROPOSAL  
=====

We acknowledge receipt of your revised Research Proposal as per our recommendations raised by the Graduate School Board 14<sup>th</sup> March, 2018 entitled "Examination of Teaching Methods in Life Skills Education for Learners with Multiple Disabilities in Special Schools in Mombasa County, Kenya".

You may now proceed with your Data collection, subject to clearance with the Director General, National Commission for Science, Technology and Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking Forms per semester. The form has been developed to replace the Progress Report Forms. The Supervision Tracking Forms are available at the University's Website under Graduate School webpage downloads.

Thank you!

JACKSON LUVUSI  
FOR: DEAN, GRADUATE SCHOOL

CC: Chairman, Special Needs Education Department

Supervisors:

1. Dr. Nelly Otube  
C/o Special Needs Education Department  
Kenyatta University
2. Dr. Maurice Makatiani  
C/o Education Foundations Department  
Kenyatta University

APPENDIX 11

COUNTY COMMISSIONER LETTER



THE PRESIDENCY

MINISTRY OF INTERIOR AND COORDINATION OF NATIONAL GOVERNMENT

Telephone: Mombasa 2311201  
Tel. 0715 040444

COUNTY COMMISSIONER'S OFFICE  
P.O. BOX 90424-80100  
MOMBASA

Email: [ccomombasa@yodan.com](mailto:ccomombasa@yodan.com)

When Replying please quote:

Ref. No. **MCC/ADM.25 VOL. II/ (16)**

**25<sup>TH</sup> October, 2018**

Deputy County Commissioners,

**NYALI**

**MOMBASA**

**CHANGAMWE**

**RE: RESEARCH AUTHORIZATION – PHOEBE INYANJI LEBANON**  
**PERMIT NO. NACOSTI/P/18/75351/26285**

This is to authorize the above named student from Kenyatta University, Nairobi to carry out research on "*Examination of teaching methods in life skills education for learners with multiple disabilities in special schools in Mombasa, Kenya*" for the period ending 23<sup>rd</sup> October, 2019.

Any assistance accorded to her will be highly appreciated.

**ESTHER I. TSUMA**  
**FOR: COUNTY COMMISSIONER**  
**MOMBASA COUNTY**

C.C.

County Director of Education  
**MOMBASA**

## APPENDIX 12

### AUTHORIZATION LETTER FROM NACOSTI



#### NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,  
2241349,3310571,2219420  
Fax: +254-20-318245,318249  
Email: dg@nacosti.go.ke  
Website : www.nacosti.go.ke  
When replying please quote

NACOSTI, Upper Kabete  
Off Waiyaki Way  
P.O. Box 30623-00100  
NAIROBI-KENYA

Ref. No. **NACOSTI/P/18/75351/26285**

Date: **23<sup>rd</sup> October, 2018**

Phoebe Inyanji Lebanon  
Kenyatta University  
P.O. Box 43844-00100  
**NAIROBI.**

#### RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Examination of teaching methods in life skills education for learners with multiple disabilities in special schools in Mombasa, Kenya,*" I am pleased to inform you that you have been authorized to undertake research in **Mombasa County** for the period ending **23<sup>rd</sup> October, 2019.**

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

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a **copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

  
**GODFREY P. KALERWA MSc., MBA, MKIM**  
**FOR: DIRECTOR-GENERAL/CEO**

Copy to:

The County Commissioner  
Mombasa County.

The County Director of Education  
Mombasa County.

# APPENDIX 13

## NACOSTI LICENCE

### THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014.

#### CONDITIONS

1. The License is valid for the proposed research, location and specified period.
2. The License and any rights thereunder are non-transferable.
3. The License shall inform the County Governor before commencement of the research.
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
5. The License does not give authority to transfer research materials.
6. NACOSTI may monitor and evaluate the licensed research project.
7. The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.

National Commission for Science, Technology and Innovation

P.O. Box 30623 - 00100, Nairobi, Kenya  
TEL: 020 400 7000, 0713 788787, 0735 404245

Email: [dg@nacosti.go.ke](mailto:dg@nacosti.go.ke), [registry@nacosti.go.ke](mailto:registry@nacosti.go.ke)  
Website: [www.nacosti.go.ke](http://www.nacosti.go.ke)



REPUBLIC OF KENYA



National Commission for Science, Technology and Innovation

#### RESEARCH LICENSE

Serial No.A 21382

CONDITIONS: see back page

#### THIS IS TO CERTIFY THAT:

**MS. PHOEBE INYANJI LEBANON OF KENYATTA UNIVERSITY, 18857-500 NAIROBI, has been permitted to conduct research in Mombasa County**

**on the topic: EXAMINATION OF TEACHING METHODS IN LIFE SKILLS EDUCATION FOR LEARNERS WITH MULTIPLE DISABILITIES IN SPECIAL SCHOOLS IN MOMBASA, KENYA**

**for the period ending: 23rd October, 2019**

  
Applicant's Signature

Permit No : NACOSTI/P/18/75351/26285  
Date Of Issue : 23rd October, 2018  
Fee Received : Ksh 1000



  
Director General  
National Commission for Science, Technology & Innovation