Relevance of vocational courses for trainees with physical disabilities to market demands at Muriranjas and Nyandarua centres, Murang’a and Nyandarua counties, Kenya

BY

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MARCH, 2014
DECLARATION

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

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DEDICATION

To the Lord Almighty, through whom everything has been possible. My beloved late father Elijah Githaga and my mother Nancy Githaga who taught me the value of education. My husband and friend, Samuel Kamweti, my children Winnie, Brian and Belinda, who have always sacrificed a lot during my absence. My sisters, brothers and my beloved in-laws for their inspiration and support.
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I am also indebted to all my respondents from Nyandarua and Muriranjas Vocational Rehabilitation Centres, and officers from NCPWD who provided the data I needed. I am specially grateful to my colleagues and classmates for being there for each other during the course of our studies. Last but not least, I acknowledge my employer TSC for offering study leave to carry out the study.

Above all, thanks be to God Almighty, for grace, strength, and sustenance throughout the course.
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<thead>
<tr>
<th>Abbreviation</th>
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<tr>
<td>APDK</td>
<td>Association for the Physically Disabled of Kenya</td>
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<td>CBR</td>
<td>Community Based Rehabilitation</td>
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<td>CWDs</td>
<td>Children with Disabilities</td>
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<td>EFA</td>
<td>Education for All</td>
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<td>GoK</td>
<td>Government of Kenya</td>
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<td>HI</td>
<td>Hearing impaired</td>
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<td>IDEA</td>
<td>Individuals with Disabilities Education Act</td>
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<td>ILI</td>
<td>Independent Living Institute</td>
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<td>MD</td>
<td>Mental Disability</td>
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<td>MoEST</td>
<td>Ministry of Education Science and Technology</td>
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<td>MPET</td>
<td>Master Plan on Education and Training</td>
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<td>NCPWD</td>
<td>National council for persons with disabilities</td>
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<td>NGOs</td>
<td>Non-Governmental Organizations</td>
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<td>PD</td>
<td>Physical Disability</td>
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<td>PWD’s</td>
<td>Persons with Disabilities</td>
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<td>SNE</td>
<td>Special Needs Education</td>
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<td>TIVET</td>
<td>Technical, Industrial, Vocational and Entrepreneurship Training</td>
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<td>TVET</td>
<td>Technical, Vocational and Entrepreneurship Training</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<td>UNESCO</td>
<td>United Nations Educational, Science and Cultural Organization</td>
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<td>USDC</td>
<td>Uganda Society for Disabled Children</td>
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<td>VET</td>
<td>Vocational Education and Training</td>
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<td>VI</td>
<td>Visually Impaired</td>
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The purpose of the study was to investigate the relevance of vocational courses offered to trainees with physical disabilities in relation to market demands. A descriptive survey design was used. The study was carried out at Muriranjas and Nyandarua vocational training centres. The centres were chosen because they were rural and had trainees with physical disabilities. Objectives of the study were to establish the type of courses offered, find out the relevance of the courses to the job market, establish the qualification of instructors and explore the adequacy and appropriateness of physical facilities used. Purposive sampling was applied to get a sample size of 62 respondents which consisted of 2 managers, 12 instructors, 44 trainees and 4 officials of the National Council for Persons with Disabilities. Data were collected by use of questionnaires, interviews and observation checklist. Data were analyzed by use of Statistical Package for Social Sciences (SPSS) computer programme and results presented in frequency tables and percentages. The findings indicated that causes offered were relevant to job markets but many trainees exited without the skills. Instructors were trained in their areas of instruction but 50% had no knowledge in special needs education. Equipment was not adequate and the few available were obsolete. Market surveys were not be carried out and curriculum had not been revised for a long time. The study recommended that vocational training curriculum be revised, more instructor employed and trainees taken for attachments to make the courses more relevant.
CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Vocational education and training occupies a central place in social and economic policies throughout the world. Vocational training is described as the acquisition of knowledge, skills and competencies for job performance (Moran & Rumble, 2004). Vocational training is also defined as the preparation for jobs that call for extensive practical experience and training but have few requirements for theory, technical knowledge or liberal arts education (UNESCO, 2002).

Persons with physical disabilities have physical limitations that interfere with school attendance or learning to such an extent that special services, training, equipment, materials or facilities are required. The impairment may be congenital or acquired, that is through accidents or diseases after birth (Friend, 2008).

According to Individuals with Disabilities Education Act (IDEA) physical disabilities category is also called orthopedic impairment, which adversely affects a child’s performance. The term includes impairments caused by poliomyelitis, bone tuberculosis and other causes like cerebral palsy, amputations, fractures and burns that cause contractures (Friend, 2008).
Persons with physical disabilities have for a long time been treated as social outcasts and are offered little support to become self-sufficient or capable of taking care of themselves and their families. For example, in America, children with physical disabilities (PD) faced a wide array of hardships. Among other things, they found themselves the subjects of frightening medical experimentation and social ostracism. They were referred to as cripples (Safford & Safford, 2006).

The greatest difficulties facing children with PD in America at the turn of the 20th century were the social and cultural barriers that prevented them from attending school. This condition signaled an obvious neglect by the United States and as such, finding a job for persons with the PDs was difficult. The Anglo tradition (in both England and USA) at one time accepted the legitimacy of disabled beggars in the cities. The presence of a physical disability was enough to secure a begging license (Safford & Safford, 2006).

With many reforms that continued to take place in the USA, the vocational education act of 1976, contained in the American public law 94-482 mandates a federal commitment to individuals with disabilities who had not previously had adequate access to publicly supported vocational education programs. Today, vocational training for person with disabilities in the US starts from primary schools and continues through high schools (Zastrow, 2008).
In Thailand, persons with disabilities (PWDs) have been largely excluded from opportunities central to participation in social, economic, political and cultural life of the society. They have had limited access to education, skills training and employment. Limited access to vocational training opportunities has been partly due to lack of basic education. Even though special education has existed in Thailand since 1939, school attendance rates of children with disabilities have been extremely low; estimated at 3.08 per cent. The lack of education then leads to them being ineligible to enter most kinds of vocational training and limits their chances of getting a job or starting self employment (Murray, 1998).

The Thailand government policy and programs for vocational training of PWDs is based on the conviction that given the opportunity, most PWDs could acquire skills which would enable them to earn a living, contribute to the local and national economy and take their place in society. This is embedded in the rehabilitation of disabled Persons Act of 1991 and recognized in the Eight National Economic and Social Development Plan (1997-2001). The policy has been implemented with varying degree of success. The policy aims at enabling PWDs to earn their own living, live independently and participate in society as far as possible. It envisages the expansion of vocational rehabilitation services for PWDs throughout to meet market demands and individual training aspirations (Murray, 1998).
In India, vocational education and training has come a long way since the countries independence. This education is provided by non-governmental organizations (NGOs) due to the government’s reluctance in the training of PWDs. The National council for PWDs recognizes their value and creates an environment that provides equal opportunities and full participation in society. It focuses on issues like vocational education and training, economic rehabilitation and a dignified life in society in wage and self employment in society.

As a result there has been a shift in the lifestyle of people with disabilities from charity to right. It is therefore no more the wish and choice of the givers to provide education, vocational training and rehabilitation, but a right of the PWDs to receive the support (Patanjali, 2005).

People with physical disabilities in India are provided education and training in vocational training centres where the staff involved is required to have different skills and knowledge depending on their clients’ needs (Patanjali, 2005). PWDs who earn their own living or make a valuable contribution to family income are able to shake off the stigma and trauma of ‘un-ability’ and dependency.

According to Pantajali (2005), a variety of studies indicate that publicly-provided technical vocational education systems generally have a weak record in meeting employer’s demands. Vocational training has often been used to reduce enrollment
pressures on academic school tracks. It has been widely regarded as a low cost alternative for weaker students and has not necessarily prepared them for the skill demands for the labour markets. International evidence points to weak alignment of skills preparation with labour market needs, and limited effectiveness of training.

In Kenya, education is perceived as a means of eradicating poverty and is important for human capital development as it prepares those who are most likely to be dependant to become self-reliant. The structure of Kenya’s education system comprises early childhood education, primary education, secondary education and tertiary education. The national examination done at the end of primary education determines who proceeds to secondary education or vocational training, and those who drop out of school (Government of Kenya, 2005).

Education and training is expected to improve peoples’ ability to take advantage of opportunities that can improve their wellbeing as individuals and be able to participate more effectively in the community and labour markets (Government of Kenya, 2003). According to Manda, Onsomo & Ngware (2007), the government of Kenya spends a lot of money in primary education. In 2005, the education budget contributed 27% of the total budget towards primary education alone. Despite all this, drop outs were recorded at 2 per cent in 2003. In 2004, transition rate from primary to secondary was 50 per cent. Majority of those who drop out and those who do not proceed to secondary schools were children with disabilities (Manda et al., 2007).
One objective of Technical, Industrial, Vocational and Entrepreneurship Training (TIVET) is to provide and promote lifelong education and training for self-reliance. Access to education and training for persons with physical disabilities is limited by a number of factors which include inaccessible environments and financial difficulties among others (Government of Kenya, 2005). The Persons with Disabilities Act 2003, specifies that all learning institutions must take into account the special needs of PWDs with respect to entry requirements, curriculum and class schedules.

In Kenya, the labour market needs in wage employment in the private and public sectors is mostly in agriculture and forestry, manufacturing, whole sale and retail trade, transport and communications, community, social and personal services. The informal sector also offers employment to a large number of young people transiting from TIVET programs (Nyerere, 2009). The information, communication and technology is an area that has been mentioned as revitalizing the economy. It is in this context that the researcher seeks to investigate and establish the type of vocational training and its relevance to the local market demands at Muriranjas and Nyandarua vocational training centres, and how they can lead to salaried or self-employment for persons with physical disabilities who may not be ready for competitive employment.

1.2 Statement of the Problem

The ability to earn a living in self-employment or in a formal job determines an individual’s economic reliance. Persons with physical disabilities desire to work and live
independently just like other members of the society. In order to foster this desire for independence and full participation in the economic life of the society, relevant training is essential. Training equips persons with disabilities with skills necessary for self or salaried employment. As a result of the special needs emanating from the handicapping conditions of persons with physical disabilities, equipment and other training resources should be adapted to their needs.

In Kenya, there are twelve government run rural vocational rehabilitation centres which offer training to trainees with disabilities. In a study by Nyamoki (2008) out of a possible 1654 graduates of industrial rehabilitation center in Nairobi since 1972 only 22 transited to formal and informal employment in Nairobi. A few of the graduates were in employment for jobs they did not train for. Vocational training is most effective when it responds to both the aspirations and ideas of trainees and opportunities available in highly differentiated, fast changing labour markets. When training does not respond to local market demands, very few trainees transit to independent living.

Mwathi in Wamocho (2003) have also noted that in Kenya, the majority of the persons with disabilities are still economically dependant on their families, relatives and friends. Further, Mwathi argues that most students with disabilities in Kenya, become beggars in the streets after completing their primary or secondary education in order to survive.
For persons with physical disabilities, the possibility of earning a decent livelihood will depend on the type and relevance of vocational skills offered in the training centres. It is in this context that this study undertakes to investigate the type and relevance of vocational training skills offered to trainees with PD in Muriranjas and Nyandarua vocational rehabilitation and training centres in relation to the labour market.

1.2.1 Purpose of the Study

The purpose of this study was to investigate the relevance of vocational courses offered to trainees with physical disabilities in relation to the community and national market demand at Muriranjas and Nyandarua vocational rehabilitation and training centres.

1.3 Objectives of the Study

The objectives of this study were:

i. To establish the type of vocational training courses offered to trainees with PD.

ii. To find out whether the vocational courses offered to trainees with PD are relevant to the job market.

iii. To establish the qualification of the instructors in their areas of trade and knowledge in special education.

iv. To explore the adequacy and appropriateness of resources, physical facilities and equipment needed in vocational training for PD.
1.4 Research Questions

The study was guided by the following research questions:

i. What type of vocational courses is offered to trainees with PDs?

ii. How relevant are the courses offered in relation to the current job market?

iii. How qualified are the instructors to train trainees with physical disabilities?

iv. How adequate and adapted are the physical facilities and equipment for use by the trainees with physical disabilities?

1.5 Significance of the Study

The findings of this study will highlight some of the challenges faced by training institutes for persons with physical disabilities. This will be useful to teachers in special primary schools, instructors in vocational rehabilitation centres, parents and other stakeholders in general who are charged with the responsibility of enhancing vocational training for persons with physical disabilities in Kenya.

The findings may also contribute to existing knowledge and provide important information and data for future researchers who may want to carry out related studies. The findings of this study may be useful to curriculum developers or trainers in the areas of vocational training for persons with disabilities.
1.6 Limitations and Delimitations of the Study

1.6.1 Limitations

The study was limited to two rural vocational centres in Murang’a and Nyandarua Counties. Findings may not be adequate for a national generalization. The researcher was faced with the problem of finding time mostly for interviews with the managers and officials of National Council for Persons with Disabilities who were sometimes out of the stations for official duties.

1.6.2 Delimitations

The study was delimited to all trainees with PDs. It was also delimited to the course instructors and the managers of the institutions. Its application to other areas of disabilities may therefore be limited.

1.7 Assumptions

The basic assumptions of the study were:

i. That vocational training helps students with PDs to positively adjust to their impairment

ii. That the vocational training prepares the trainees with PDs to fit into society.

iii. That the training centre offers courses that are relevant to the needs of the local community.

iv. That the instructors are well versed and qualified in their areas of training.
1.8 Theoretical and Conceptual Framework

1.8.1 Theoretical Framework

Human Capital Theory: Investment in Education and Training by T.W Schuhz, 1960

Human capital theory postulates that education and training are a form of investment in human beings. According to Kwesiga (2002), the theory was first articulated by Adam Smith in 1776 when he compared the value of an educated worker to an expensive machine. The theory gained prominence in 1960 when T.W Schuhz first published his study ‘investment in Human Capital’, on investment in education in the US economy. Schultz argues that education, training and investment in health open up opportunities and choices that otherwise would be unavailable to many individuals. He compares the acquisition of knowledge and skills to acquiring the “means of production.” This means that workers can be in control of increasing their own productivity and earning (Kwesiga, 2002).

Like any other investment, education and training gives returns which are reflected in human beings. The underlying belief is that education creates assets in the form of knowledge and skills which in turn increases the productivity of educated workers. As a result those with more education receive higher lifetime earnings than those with less or no education (Kwesiga, 2002). The theory compares investment in physical and human capital and concludes that improvement in the productive capacity of educated and
trained personnel through general or specific education or training can be as profitable as investment in new machinery or any other form of traditional physical capital.

Kwesiga (2002) also notes that those who advance in the human capital theory argue that investment in human capital will accelerate economic growth and point to other types of benefits. Human capital theory also embodies health, nutrition, fertility and general welfare of the people, besides being an investment in education. This study therefore fits within the concept of this theory in that when the person with PD receive good education and vocational training, they become independent, are able to take care of their families welfare and also contribute to the economic growth of the country. It would be uneconomical to invest a lot of money in basic education in special schools and the individuals with physical disabilities fail to continue from class eight or form four. They need vocational training so that the rate of returns will be higher than the rate of investment.
1.8.2 Conceptual Framework

Source: Researcher’s own adaptation
1.9 Operational Definition of Terms

**Disability:** Loss or reduction of functional ability due to physical impairment.

**Handicap:** Disadvantage or restrictions of activity which has come as a result of society’s attitude towards disability.

**Independence:** The ability to become self-reliant in all aspects of life.

**Market demands:** The type of skills needed in the market within a specified period of the economy.

**Physical disability:** Any impairment which limits the physical function of limbs, fine or gross motor ability.

**Physical impairment:** This includes having deficient deformities such as absence of a limb or non-use of a limb, hunchback or a deformity of any part of the body. These deformities often affect movement.

**Relevance:** Efficiency with which vocational programmes enable trainees to find and sustain their jobs both in self-employment and in wage employment.

**Special education:** A system of education which caters for special needs of children with Disabilities (CWDs). It has adapted, adopted and specialized curriculum, intervention processes of teaching, special facilities and modified environment.

**Vocational skills:** Those practical skills which allow a person to master a particular subject or procedure that is applicable to a career.

**Vocational training:** The acquisition of knowledge, skills and competencies for job performance (Moran & Rumble, 2004).
CHAPTER TWO
LITERATURE REVIEW

2.0 Introduction
This chapter presents review of literature related to the study. The chapter has four sections; vocational training skills and market demands, qualifications of trainers, resources for vocational training and a short summary of the related literature.

2.1 Vocational Training Skills for Persons with Physical Disabilities
Vocational training is a set of activities aimed essentially at the acquisition of the practical skills, knowledge necessary for employment in a specific occupation or in a group of related occupations in any branch of economic activity (UNESCO, 1977). Vocational training programmes equip PWDs with necessary and practical skills set for employment. Quality education and training contribute significantly to economic growth, better employment opportunities and expansion of income generating activities (MoEST 2004). According to Ayodo (1990), rural vocational rehabilitation centres in Kenya were established with an aim of offering vocational training skills mainly useful for self employment in Kenyan rural environments. In a study by Ibuathu (2005) on the impact of vocational training for rural development in Nyambene District, he notes that youth polytechnics cover a narrow spectrum of skills needed in the rural areas and specifically the local community. The Koech report of (1999) points out that, vocational training centres be encouraged to offer courses according to the needs of their localities such as
short-tailor-made courses for upgrading skills of farmers, business communities, juakali operators and health workers for the surrounding community. The commission also points out that graduates of vocational training centres are not getting employed or embarking on self employment as they lack appropriate skills and resources.

In Pakistan, a study by Khatoon (2004) was done to establish whether vocational training is an essential tool for integrating persons with disabilities in society and whether it makes them productive members of their communities. The researcher used a survey design, in which he visited 62 different training centres which were purposively sampled. They included centers for individuals who have physical disabilities, visual impairments, mentally disabilities and hearing impairments. A population of 200 participants was used among them the administrators of the institutions, instructors and students with disabilities. 100 respondents were students selected through random sampling. In his findings, the researcher indicated that there is limited choice of trade and that vocational training centres lack a standard curriculum. The skills acquired do not help the graduates to get jobs. This suggests that they are not relevant to job market demands (Khatoon, 2004).

The study also notes that some training programmes offered are pre-vocational in nature and that the duration of training which is, six to twelve months is not sufficient. This is because trainees without disabilities took the same duration as their peers with disabilities
(Khatoon, 2004). The Pakistan study relates to this study in that, the researcher is trying to find out the relevance of the skills offered and how they can help the trainees in the job market.

In India, vocational approach which is tailor-made for PWDs is a work related curriculum where the main emphasis is integration into the society and economic productivity to the maximum extent possible. Some of the courses offered include creative arts and craft, where students are offered training in screen and stencil printing, painting, embroidery, handmade stationery, tailoring and making of gift items. Other courses are in catering where students are taught how to make fast foods, learn nutrition and serving, health and hygiene (Patanjali, 2005).

In countries like Australia and Iran, students with PDs often terminate their education before the ninth year of their compulsory primary education. Therefore, there is an orientation of teaching subjects towards practical inclusion of occupational techniques in handcraft and artistic education. Visits are made to various enterprises, workshops and relevant exhibitions to find out the market demand. In Iran, vocational subjects for the PD are usually individualized due to their heterogeneous nature. Interest and capability of students is put into consideration. Students with PDs are taught how to use initiatives to gain self-confidence. Skills taught to students include handicraft, drawing and painting, sewing, dress making, yarning dolls and doll making, basic carpentry and very fine wood
curving, carpet-making, hand knitting and machine knitting and lamp-shade making (UNESCO, 2002).

Courses offered in Thailand for PWDs included; agricultural activities like flower farming mushroom farming and animal husbandry. Other courses are in leatherwear, typing and computer courses, repair of electrical appliances, hairdressing and making of mosquito nets. Concern with relevance of training to labour market openings has been expressed and there is recognition that segregated training has not always equipped PWDs with the skills they need to obtain and retain a job or to run a successful small enterprise (Murray, 1998).

In Zambia like many other countries in Africa, it is believed that PWDs have the potential to earn decent livelihoods, support their families and contribute to their communities and the wider society. However, this is hindered by lack of training in marketable skills. In an exploratory survey conducted by International Labour Organization (ILO) in 2007, a number of challenges were found to be the reasons why persons with PDs are not yet earning decent livelihood (ILO, 2007). In the survey, 45 per cent of 276 respondents were persons with PDs, who were purposively selected on basis of their vocational training. The survey carried out by a team of 32 surveyors in three districts found out that courses mostly offered for PWDs are telephone operators and joinery. Some of the courses were said to be unsuitable for persons with PDs. Some courses were relevant to the job market while others were outdated. Stereotypical skills training “PWDs jobs” such as telephone
operators were frequent. These results indicate the need to review training provisions to have marketable skills training (ILO, 2007).

According to Independent Living Institute (ILI) in 2000, PWDs in Tanzania are dependent on families and friends. A policy that must include provisions for the right kind of special training, which impart skills that will assist PWDs to gainfully involve themselves in production or distribution, is necessary. An example of such a skill is entrepreneurship.

PWDs in Uganda have been grossly underrepresented in training environment and work places. The consequence of this state is destitution and dependency. However, Uganda society for disabled children (USDC) which is a local NGO is committed to vocational training for persons with PDs. Through community-based rehabilitation (CBR) approach, they train trainers who in turn offer training in areas like leather work, crafts, bakery, bee-keeping, electronic assembly and repair, tailoring, carpentry, welding, motorcycle repair and agriculture (Albu, 2005).

In Kenya, according to a master plan on education and training (1997-2010), the youth training (including those with disabilities) and vocational training centres are expected to offer vocational training opportunities that are designed to achieve the following goals:

- Provide increased training opportunities for the number of primary school leavers to enable them be self-supporting.
- To develop practical skills and attitudes that will lead to income generating activities in the urban and rural areas through self-employment.
- To provide practical education and training skills, which are responsive and relevant to Kenyans agricultural, industrial, commercial and economic needs.
- To provide the technical knowledge and vocational skills necessary to enhance the pace of this nation development, while at the same time producing skilled graduates for both formal and informal sectors.

Skills offered in most vocational centres in Kenya are traditional craft, Agriculture, leather work, carpentry, tailoring and dressmaking, home science and cloth printing, (Oyodo, 1990). Other skills mostly offered in urban vocational centres include metal work, secretarial courses and telephone operator courses. Most PWDs in many countries live in rural areas. It is necessary to identify income generating opportunities in which they can train and become self-reliant while remaining within their communities. PWDs have tremendous capacities and courage and must be given a chance to prove themselves. Capacitating them in offering courses that lead them to becoming micro entrepreneurs improves their livelihood and has beneficial effects on the quality of their life and health. It also helps in reducing poverty and dependency and leads to better integration into their communities (Hanko, 2003).
2.2 Labour Market Demands

There is a strong link between training and the labour market. Labour markets require individuals with skills that are in demand. Relevant skills are necessary conditions for good labour market outcomes (Fasih, 2008). During the past several decades, a mismatch has been evident in many countries between the skills imparted by the national education system and those demanded by the workplace. This mismatch has been exacerbated in recent years with the integration of new technologies in almost every space of professional activity (UNESCO, 2002).

Quality education and training contribute significantly to economic growth, better employment opportunities and expansion of income generating opportunities (MoEST, 2004). However, current training programmes in many countries are supply-driven. TVET programmes in Kenya and many other countries are very often not designed to meet observed or projected labour market demands. The emphasis appears to be on the unemployed to find jobs without any critical attempts to match training to available jobs. This situation results to many graduates of vocational training not finding jobs or finding themselves in jobs for which they have had no previous training for. Training institutions do not track the employment destination of their graduates. Consequently, variable feedback from past trainees, on the quality of training and the opportunity for their experience-based input to be factored into the review of curricula and training packages are lost (Afeti, 2004). Assuring relevance is very important; this means that skills being imparted to trainees are related to the demands in the market. Labour market information
systems and tracer studies which track the destination of former trainees can provide useful feedback for their revision of training programmes so as to enhance trainees’ employability. The main objectives of vocational training in several countries are; to help the unemployed find jobs, to prepare the school leavers to enter the job market, and to upgrade skills of employed workers (Gill, Fluitma & Dar, 2000). The authors also maintain that Vocational Education and Training (VET) is more effective when used to meet clearly observed, current labour market needs than when used to meet purposes such as helping the unemployed find jobs.

In Kenya, vocational/technical training should concentrate on skills which anticipate employment in the local community, self-employment and further formal or on the job training. It should also be demand driven so as to be responsive to available openings in salaried and self-employment (MoEST, 2003). The government proposed in the same document that PWDs be educated and made self-reliant by equipping them with technical knowledge and skills. According to Kamere (2004) vocational training empowers persons with physical disabilities to enjoy economic freedom. She advises that it should therefore be relevant in content be imparted in the most effective way possible and relevant to economic needs of the country. In Uganda, according to Albu (2005) training of trainers is considered as it helps sensitize them on the needs of PWDs and guide the trainers in adapting the training facilities and procedures.
In Kenya, the current TIVET curriculum is inflexible and not responsive enough to the changing needs of the labour market. There is a mismatch between skills learned in training institutions and skills in demand from the industry (GoK, 2005). There is need to be market responsive. Enterprise led approaches to training enhances efficiency and positive impact, first by co-opting the power and resources of market and second by closely linking training with local market demands.

Furthermore, each community, like each market is to some degree unique. Community involvement is needed to identify, assess and respond to those unique characteristics, and help the skills training programs accommodate the interest of learners, of the market and of the broader society (UNESCO, 2002). Determining the demand for skills is best achieved through labour market information systems and other survey instruments. Training institutions can conduct local labour surveys in and around their localities. The information gathered and analyzed help in development of new revised courses and training programmes. Training programmes should be guided by the needs and demand of enterprises and the labour market. A fundamental principle underlying any training programme is that it should be linked to identifiable job opportunities or to appropriate small-scale activities that have the prospect of generating sustainable income. There is need to assess training demand in both formal and informal sectors (UNESCO, 2002).
2.3 Qualification of Trainers

International Labour Organization (ILO, 1983) indicates that persons involved in vocational guidance, vocational training and placement of PWDs should have adequate knowledge of disabilities and their limiting effects. They should also have knowledge of the support services available to facilitate PWDs integration into the active economic and social life of the community. Teachers and trainers of PWDs in India are required to have additional skills and knowledge depending on their clients’ needs. Those involved in education of Children with Disabilities (CWDs) organize short in-service programs to help the staff gain expertise in areas that had not been covered in the pre-service training programs (Patanjali, 2005).

In addition to qualification in their trade areas, vocational trainers should also be competent in guidance and counseling, independent living skills and life skills instructions. This is because some students with disabilities have a problem with accepting their individual weakness. This therefore shows that they have failed to develop their identity and adjust to their handicapping conditions (Wamocho, 2003). It is therefore important that trainers have guidance and counseling knowledge and skills to be able to help learners with disabilities to accept themselves. The trainers, as counselors should therefore be supportive to the individuals with disabilities, considering their uniqueness, help them to make the best choices in the courses they choose (Patanjali, 2005).
Students with disabilities should also be prepared to function independently as adults. This preparation includes more than just attaining a particular vocational skill. It includes roles and responsibilities of adulthood, both paid and unpaid workers responsibilities and family roles (Meese, 2001). Meese continues to advice that instructors in the institute should involve students with disabilities in community-based instructions. These instructions require instructors to identify relevant independent living skills in the community and teach them for example, how to make purchases for their self-employed enterprises.

In addition, life skills instructions should be integrated in the training programs. These skills include competences and skills needed to survive in common situations that they will find themselves in as adults. Such skill areas are in employment, home and family, leisure pursuits, community involvement, physical and emotional health as well as personal responsibilities and relationships.

It is important to provide opportunities to instructors working with PWDs for staff development to update themselves with issues of disabilities. They should also have the knowledge of different teaching strategies to use in their classrooms. Some of the strategies are the individualized and group instructional techniques and working cooperatively with other professionals like physiotherapist, occupational therapist, psychologist and social workers (Billingsley, 2005).
Many studies have indicated that vocational training in many countries is provided by some unqualified trainers. In the study of the status of vocational training programs in Pakistan mentioned earlier, in which 62 institutes were visited, one of the findings was that many of the programs lack professional personnel (Khatoon, 2004).

In the study of Thailand mentioned earlier, the country is facing many challenges as far as qualification of trainers is concerned. They include; lack of sufficient, adequately trained instructional staff and lack of appropriate training methods. Methods of instructions are essential to the success of training in other formats such as short-term training at local levels or on job-training (Murray, 1998).

In Kenya, the Kenya Technical Teachers College (KTTC) is one of the institutions which train technical teachers. The college trains teachers in areas like mechanical engineering, building and civil engineering, electrical engineering, business education, information studies, entrepreneurship, computer studies, institutional management and many more (Kimathi, 2009). In her research on constraints of inclusion of students with hearing impairments for training in KTTC, Kimathi found out that lecturers at KTTC have not been trained in special need education (SNE), despite the fact that they need to impact some knowledge of SNE to their trainees. This shows a gap in that these instructors will then teach in special institutions with no knowledge of SNE.
The commission of enquiry (1999), otherwise known as the Koech report recommends that vocational training centres be staffed with properly trained and qualified instructors. The Kamunge report of 1988 recommends that youth polytechnic instructors be trained in pedagogy and their terms and conditions of service be improved. GoK (2005) states that in Kenya vocational training centres have teachers who are inadequately trained and mechanisms for quality assurance are weak due to lack of adequate support to inspections and supervision. There is a strong link between training and the labour market. Labour markets require individual with skills that are in demand. Relevant skills are a necessary condition for good labour market outcomes (Fasih, 2008). Quality education and training contribute significantly to economic growth, better employment opportunities and expansion of income generating opportunities (MoEST, 2004). However, disability limits access to education and training, and leads to economic and social exclusion.

2.4 Resources Needed in Vocational Training

Persons with disabilities can and want to be productive members of the society. In both developed and developing countries promoting more inclusive societies for PWDs require improved access to basic education, vocational training which is relevant and opportunities for employment suited to their skills, interest and abilities (United Nations Economic and Socio Commission for Asia and the Pacific, 2002). For this to happen, adaptations are needed. Physical environments especially in the training institutes should be accessible. There should be strong regional advocacy and the spread of barrier-free designs among policy makers and technical personnel responsible for construction of
public facilities. They should aim towards reducing barriers in the built environments especially in the developing countries (United Nations Economic and Socio Commission for Asia and the Pacific, 2002).

In earlier research work carried out in youth polytechnics in Kenya, inadequate teaching and training resources has been a major hindrance in pursuit of institutional objectives (Ibuathu, 2005). Resources include both physical and human. Studies carried out show that there is a problem of such resources, both human and physical. In Thailand for example trainers were not enough in public institutions. The ratio of instructors to trainees was 1:18. In institutes managed by non-governmental organizations, the ratio is 1:10 or less. Public welfare institutes are funded by the government though the funds are not enough. There were old and out dated equipment and tools.

In the pacific region, there are Disability Acts that caters for learners with disabilities and specifically in the areas of vocational training. For example in Philippines, the Magna Carta for disabled is an Act which provides rehabilitation, self-development and self-reliance for PWDs. The Act states that learners with PH shall be provided with adapted tools and machineries. The adaptations include but not limited to:

- Hand control for learners with non functioning legs and feet.
- Control panels for those with non functioning hands.
- Mouth control devices for those with non functioning limbs.
The height and size of machines shall be considered in making adaptations in the teaching-learning environments. Desks and chairs shall be adjusted to the needs of the learner with PDs.

In Pakistan, an Ordinance to Provide for Rehabilitation and Welfare of Disabled Persons Act states that the federal government shall establish a fund known as the Disabled Person’s Rehabilitation Fund. This fund shall be utilized in providing artificial limbs for person’s with PDs, medical treatment and for establishing vocational training centres (Pakistan Disability Act, 2000).

In Tanzania, due to lack of necessary facilities and equipment some technical colleges for PWDs closed down forcing the trainees to end up as professional beggars through faults not of their own, ILO (2000).

In Kenya, the objective of TIVET is to provide and promote lifelong education and training for self-reliance. The challenges facing the subsector include inadequate facilities and capacity to cater for those who complete primary school and wish to undertake TIVET. There is also underutilization of available training facilities. Equipment and physical facilities used for training are either, inadequate, old and outdated. Most of the training and reference materials and text books are sourced from overseas which make them costly, hence unaffordable (GoK, 2005).
Vocational training institutes are managed by various government departments. This causes a challenge to the sector in terms of effective co-ordination of training, mismanagement of scarce resources and conflict of jurisdiction. There is need therefore to place skills training institutes under one co-coordinating ministry in order to make them appropriately staffed and equipped to provide credible TIVET programs (GoK, 2005). The same reference as outlined in the sessional paper No. 1 of 2005, it is necessary for the Government of Kenya to rehabilitate facilities in public TIVET institutions to ensure quality training. Through the policy framework, the government promises to mobilize resources to rehabilitate TIVET centres and support development of appropriate physical infrastructure for students with special needs. Another important policy for persons with PDs is the establishment of a financing mechanism through bursaries and scholarships.

In a parliamentary debate on 11th July, 2007, it was noted that most special schools do not offer vocational training due to costs involved. Members suggested that Constituency Development Fund (CDF) be used to put up workshops in schools and vocational centres.

Financing of vocational training for PWDs still remains a major challenge for the government. On average, 0.2 percent of the total education budget spent on special education is grossly inadequate (GoK, 2005). Most of the financing comes from civil societies, particularly local and international NGOs. In light of the government’s commitment to EFA goals, a framework incorporating the financing requirements of
special education should be established as part of the overall strategy for the sub-sector, (GoK, 2005).

Physical access for persons with PDs is very crucial. Most buildings used by students with PDs should have entrances that are accessible to students who use mobility aids like wheelchairs, walkers, canes and crutches. This will ensure classroom and workshops access. Seating needs should be observed for the same group of students. Desks and tables should have enough clearance for students on wheelchairs to get their legs underneath. Lab tables and computers consoles should be set up so that wheelchair users can comfortably reach the equipment, (Academic Accommodations for students with disabilities, 2002).

2.5 Summary of Reviewed Literature

Literature reviewed in this chapter show that in many countries, vocational training of persons with physical disabilities faces a number of challenges. Studies reviewed in different countries appreciate that vocational training is an important venture towards integrating PWDs into the society. If relevant skills and knowledge are imparted to learners with PDs, they become self-reliant and participate in the lives of their families and communities appropriately. However, in most studies, it is clear that the courses offered to students with PDs are not relevant to the job market either in salaried employment or self-employment. There is no market survey done so that courses can be improved in order to assist the students in their own communities. This therefore means
that the objective of vocational training in many countries, which is to prepare school leavers to enter the job market, is not realized.

It has also come out clearly that vocational training is offered by staff that is not well qualified in special needs education and in their trade areas. For the trainers in vocational training centres to be effective and train learners who have disabilities, they need to have knowledge of disabilities. However, from different studies carried out in Thailand, India, Pakistan, Zambia, Uganda, Tanzania and Kenya, this has not been the case. Most of the vocational centres for persons with disabilities are not provided with opportunities for staff development where teachers can refresh their knowledge and skills and be empowered to serve their clients.

Despite the fact that the staff is not fully qualified, literature reviewed also show that they are not sufficient. Some centres have teacher student ratios of 1:10 or 1:18 which is high considering that each individual has his unique special needs and interests. Materials and tools used in the training are either insufficient, old and out dated. There are financial constraints that make the centers not update their teaching/learning tools and materials. Government funding in most countries has not been enough and therefore, the help of NGOs has been very crucial in offering vocational training to persons with physical disabilities. It is for this reason that the researcher sets out to investigate skills offered and their relevance to job markets in their communities.
3.0 Introduction

This chapter describes the methods employed in conducting the study and focuses on the research design, research variables, the location of the study, target population, sampling procedures and sample size. It also describes the research instruments, pilot study, reliability and validity of the instruments, data collection and analysis procedures and finally, logistical and ethical considerations.

3.1 Research Design

This study utilized a descriptive survey design. The researcher attempted to describe the existing state of vocational training in Muriranjas and Nyandarua vocational training centres. The researcher used descriptive survey design which was found to be the best in establishing the courses offered in the two institutions in preparing the trainees with PDs for life independently in their communities. The study used both qualitative and quantitative approaches. This is supported by Orodho (2004) who observes that research designs are better conceptualized as descriptive or experimental.

3.1.1 Research Variables

The independent variables of this study were the type of vocational training skills offered to trainees with physical disabilities, the relevance of vocational skills, the qualification
of the instructors and the availability of facilities, equipment and other training resources in the centers. The dependent variable was the acquisition of vocational skills by the trainees.

### 3.2 Location of the Study

The study was carried out in Muriranjas and Nyandarua vocational rehabilitation/training centres. Muriranjas vocational centre is in Kahuro District, Murang’a County. It is approximately 165km from Nairobi, 25 km from Murang’a town and only 5km from Kahuro town which is the district’s headquarters. It is directly opposite Muriranjas District Hospital. Nyandarua vocational centre is about 3km from Nyahururu town along the Nyahururu-Nairobi highway. The centers were chosen because they are among the 12 government rural vocational rehabilitation centres that offer training to PWDs established in the 1970s. Other centres in this category include: Bura, Embu, Kericho, Itando, Kakamega, Kisii, Kabarnet, Odiado, Machakos and Nairobi industrial rehabilitation which is an urban category.

### 3.3 Target Population

The study targeted all the trainees with physical disabilities, all vocational training instructors and the managers of Muriranjas and Nyandarua vocational rehabilitation centres. The study also targeted officials of the National Council for Persons with Disabilities (NCPWD). The total target population was 172 respondents.
3.4 Sampling Technique and Sample Size

3.4.1 Sampling Technique

Purposive sampling was used to select the instructors, the trainees, and the managers. The centres admit 60% trainees with all categories of disabilities and 40% of those without disabilities. Purposive sampling of all respondents with physical disabilities was used due to the small numbers available in the centres. The same technique was used to sample four officers from the NCPWD. These officers were purposively selected because they had the required information about the demands in the labour market. They included the mainstreaming officer, the placement officer, the training officer, and the procurement officer.

3.4.2 Sample Size

The sample size comprised of 2 managers of the institutions, 12 instructors and 44 trainees with physical disabilities in the two institutions. Four (4) officers from the NCPWD were included to give details of the market demand. This gave a total of 62 respondents.

Table 3.1: Sampling Grid

<table>
<thead>
<tr>
<th>Type of respondents</th>
<th>Population</th>
<th>No. Sampled</th>
<th>Percentage</th>
<th>Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>2</td>
<td>2</td>
<td>100</td>
<td>2</td>
</tr>
<tr>
<td>Instructors</td>
<td>12</td>
<td>12</td>
<td>100</td>
<td>12</td>
</tr>
<tr>
<td>Trainees</td>
<td>123</td>
<td>44</td>
<td>35.8</td>
<td>44</td>
</tr>
<tr>
<td>NCPWD Officers</td>
<td>35</td>
<td>4</td>
<td>11.4</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>172</strong></td>
<td><strong>62</strong></td>
<td><strong>36</strong></td>
<td><strong>62</strong></td>
</tr>
</tbody>
</table>
3.5 Research Instruments

The researcher used three types of instruments for the study. They included questionnaires, interview guides, and observation checklist.

The instruments were formulated and developed by the researcher ensuring that they covered the objectives of the study and approval given by the supervisors.

3.5.1 Questionnaires

Questionnaires were used to obtain information from the instructors and the trainees with PDs. The instructors’ questionnaire of 10 items was divided into two sections; the first section focused on the background information of the instructor specifically gender and their academic qualifications. The second section focused on the type of vocational courses they train and their relevance to market demands. The trainees’ questionnaire of 7 items also had two sections; one focused on their gender and basic educational background and the second focused on their training aspirations and needs.

3.5.2 Interview Guides

Orodho (2009) states that interview guides make it possible to obtain the data required to meet the specific objectives of the study. Two sets of interview guides were used. One with 14 items was used to obtain information from the managers on the type of vocational training, its relevance to market demands and availability of training resources in the centres. The other set of 6 items were used for officers from NCPWD to obtain information on the market needs and demands and their involvement in curriculum development and revision. All interviews were on a face-to-face basis.
3.5.3 Observation Checklists

The researcher used an observation checklist to gather information on the physical environment at the centre to establish its suitability for trainees with PDs. The observation checklist had 10 items which focused on infrastructure in the institutions particularly the availability of concrete paths, wide doors, rumps and other adaptations in the workshop. It also focused on the availability, adequacy and suitability of training equipment and other resources. This supplemented information obtained from the questionnaires and interviews.

3.6 Pilot Study

The researcher conducted a pilot study in Variety Training Center in Thika, Kiambu County. The institute was selected because it offered vocational training to persons with physical disabilities. It was therefore appropriate for the purpose of discovering any weakness in the instruments. The subjects used in the pilot study included: 1 manager, 4 instructors and 10 trainees with PDs who were randomly selected giving a total of 15 subjects.

3.6.1 Validity

Validity indicates the degree to which an instrument measures what it is supposed to measure. In this study, the researcher discussed the content of the instruments with supervisors who are well versed in the area under study. They reviewed relevance and clarity of the instruments and provided feedback. Their recommendations and advice were adhered to and changes made in the final instruments.
3.6.2 Reliability

Reliability is a measure of the degree to which a research instrument would yield the same results or data after repeated trials (Mugenda, 2008).

The researcher established reliability of the instruments by use of test-retest method. This was done by administering the instruments to the identified respondents in the pilot institute and repeating the same procedure with the same instruments on the same respondents after a period of two weeks. The correlation between the pre-test and post-test scores was calculated. A correlation coefficient of 0.8 was obtained. This was considered high enough to judge the instrument as reliable.

3.7 Data Collection Techniques

The researcher collected data by use of interview guides, questionnaires and an observation checklist. The interview guides collected data from the managers of the institution and the officers of NCPWD. The researcher tape recorded the interviews and took notes during the interviews to avoid losing any information. The recorded interviews were transcribed and all the information compared with the field notes.

Questionnaires were administered to the trainees with physical disabilities and the instructors. The questionnaires were delivered on a day agreed upon by the researcher and the respondents. The researcher visited all the workshops, using observation checklist and recorded the procedures used and ascertained the availability, the appropriateness and adequacy of the equipment and materials that were used. Any other observation of the
facility, which was of use to the researcher for the purpose of the study, was recorded. Data were collected between November, 2012 and February, 2013.

3.8 Data Analysis

Data were analyzed both qualitatively and quantitatively. Questionnaires from the respondents were checked for completeness. All 56 questionnaires that were dully completed were included in the analysis. Items from the questionnaire were edited and coded manually. The codes were then keyed into the computer and processed using the statistical package for social sciences (SPSS) program. The use of SPSS yielded descriptive statistics. Data were presented in frequency tables. Qualitative data were transcribed from the tape and text and then analyzed using thematic analysis.

3.9 Logistical and Ethical Consideration

3.9.1 Logistical Consideration

The researcher obtained authority to carry out the research from the National Council for Science and Technology (NCST) through the graduate school of Kenyatta University. A copy of the research permit was also given to the District Education officers in the two districts before the institutes were visited. The same copy was taken to the managers of the institutions and the NCPWD. The researcher then agreed with the managers and the officers of the NCPWD on appropriate days to collect data.
3.9.2 Ethical Consideration

Research calls for a commitment to honesty and respect for the dignity and privacy of those people who are subjects of research. The researcher established rapport with respondents before commencing the process of data collection. The consent of the participants to tape record the interview was sought and reason for it given. The researcher protected the anonymity of the respondents.
CHAPTER FOUR

PRESENTATION OF DATA ANALYSIS, RESULTS AND DISCUSSION

4.0 Introduction

This chapter presents analysis and discussions of the findings of the study. The study aimed at investigating the relevance of vocational skills for trainees with physical disabilities to market demands at Muriranjas and Nyandarua vocational centres in Murang’a and Nyandarua counties, Kenya. Responses were discussed under the following objectives:

- Type of vocational courses offered to trainees with physical disabilities.
- Relevance of vocational courses offered to trainees with physical disabilities in relation to the job market.
- Qualification of the instructors in their areas of trade and knowledge of special needs education.
- Adequacy, availability and appropriateness of resources, physical facilities and equipment needed in vocational training for trainees with physical disabilities.

All the responses from trainees were from those with physical disabilities who trained alongside others with other categories of disabilities and without disabilities.
4.1 Demographic Information

4.1.1 Gender of Respondents

Table 4.1a: Gender of the trainees

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>22</td>
<td>50.0</td>
</tr>
<tr>
<td>Female</td>
<td>22</td>
<td>50.0</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.1a indicates that out of the forty-four respondents, 22 representing (50%) were male while 22 (50%) were female. This showed a good representation of gender.

Table 4.1b: Gender of the instructors

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>7</td>
<td>58.3</td>
</tr>
<tr>
<td>Female</td>
<td>5</td>
<td>41.7</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4.1b shows that out of the 12 respondents, 7 representing (58.3%) were male while 5 (41.7%) were female. This showed a fair distribution of gender in the two institutions.
4.1.2 Academic Qualification of Instructors

Table 4.2: Academic qualification of instructors (N = 12)

<table>
<thead>
<tr>
<th>Academic qualification</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>KCPE</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>KJSE</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>KCSE</td>
<td>8</td>
<td>66.7</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

The table shows that out of twelve responses from instructors, 8 representing (66.7%) had KCSE certificates, 2 (16.7%) had KCPE certificates and 1 (8.3%) had KJSE certificates.

The findings showed that some instructors had no secondary school education. This was further confirmed by the manager of Muriranjas vocational rehabilitation center in an interview when responding to the question of training of instructors, that some of the staff members were former vocational trainees of the same institute who did not have secondary school education.

4.1.3 Highest Level of Schooling of Trainees

A question was asked in order to find out the level of basic education the trainees had acquired before joining vocational training.

Table 4.3: Highest level of schooling  (N = 44)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No education</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Did not complete schooling</td>
<td>4</td>
<td>9.1</td>
</tr>
<tr>
<td>Primary schooling</td>
<td>14</td>
<td>31.8</td>
</tr>
<tr>
<td>Did not complete secondary</td>
<td>7</td>
<td>15.9</td>
</tr>
<tr>
<td>Secondary</td>
<td>17</td>
<td>38.6</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
The table 4.3 shows that out of the 44 respondents 1 representing (2.3%) had no basic education at all. Four (9.1%) had not completed primary school, 14 (31.8%) had primary school education. Seven (15.9%) had not completed secondary school education, 17 (38.6%) had secondary education. The results showed that a good number had secondary education and therefore basic education could not be a reason for limiting the courses being offered. This finding supports MoEST (2003) who reported that PWDs should be educated and made self-reliant by equipping them with basic education and technical knowledge and skills.

4.2 Types of Vocational Training Skills Offered

4.2.1 Courses Being Offered and Number of Instructors Teaching Them

A question was asked on the courses offered for the purpose of finding out the type of vocational skills offered.

Table 4.4: Courses being offered and number of instructors teaching them (N= 12)

<table>
<thead>
<tr>
<th></th>
<th>Frequency of instructors</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodwork</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>welding and general fittings</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Agriculture</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Knitting</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>Tailoring and dress making</td>
<td>3</td>
<td>25.0</td>
</tr>
<tr>
<td>Shoe making and leather work</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Cosmetology, hair dressing and beauty therapy</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Computer</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Electrical engineering</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
The findings revealed that courses offered in both Nyandarua and Muriranjas were woodwork, welding and general fittings, agriculture, knitting, tailoring and dressmaking, shoe making and leatherwork, cosmetology, hairdressing and beauty therapy, computer and electrical engineering.

Study findings also revealed that most of the courses being offered had at least 1 representing (8.3%) instructor teaching them. Tailoring and dressmaking had 3(25%) instructors while knitting had 2 (16.7%) instructors.

The findings were similar to those of many studies carried out in other countries, for example UNESCO (2002), ILO (2007), Albu, (2005), which pointed out that most of the courses offered to trainees with PDs were leather work, tailoring, welding, electronic assembly, wood work and agriculture, some of which may be unsuitable for the trainees with PDs. In an interview with the manager of Nyandarua center, the institute had improved courses offering by introducing entrepreneurship. This supports ILI (2000) who pointed out that skills in entrepreneurship would be gainful to PWDs in production and distribution.

### 4.2.2 Courses Being Taken by Trainees

The questions sought to find out courses being taken by the trainees in order to come up with the actual type of vocational skills.
Table 4.5: Courses being taken by trainees (N = 44)

<table>
<thead>
<tr>
<th>Course</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knitting</td>
<td>4</td>
<td>9.1</td>
</tr>
<tr>
<td>hairdressing and beauty therapy</td>
<td>10</td>
<td>22.7</td>
</tr>
<tr>
<td>Electrical engineering</td>
<td>14</td>
<td>31.8</td>
</tr>
<tr>
<td>Tailoring dress making</td>
<td>9</td>
<td>20.5</td>
</tr>
<tr>
<td>Leatherwork and shoe making</td>
<td>3</td>
<td>6.8</td>
</tr>
<tr>
<td>Welding and General fitting</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>No Response</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.5 shows that out of the 44 respondents, 14 representing (31.8%) were taking a course in electrical engineering. Ten (22.7%) were taking hair dressing and beauty therapy, 9 (20.5%) were taking tailoring and dressmaking. Three (6.8%) were taking a course in shoe making, 4 (9.1%) were taking knitting while 2 (4.5%) were taking course in welding and general fittings. The findings support Oyodo (1990) who noted that leatherwork, carpentry and dressmaking were some of the courses offered in the Kenyan rural vocational rehabilitation centers. During the interviews with the managers of the institutions, it was noted that computer training was being offered in the two institutions. In Nyandarua, it was compulsory for all the trainees. However, none of the trainees indicated that they were taking it because it was not an examinable course. The purpose of it being offered was to start introducing technology slowly before offering it as a course of choice. At Muriranjas, there were only two computers at the time and therefore they had not started offering it to all the trainees.
### 4.2.3 Teaching of Other Skills

The question was intended to find out whether the instructors taught other skills other than the trade area.

Table 4.6: Teaching of other skills (N= 12)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>7</td>
<td>58.3</td>
</tr>
<tr>
<td>No</td>
<td>5</td>
<td>41.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.6 shows that 7, representing (58.3%) of the instructors indicated that they taught other skills while 5 (41.7%) did not teach any extra skills. The 41.7% who did not teach other skills differed with Meese (2001) who advises that instructors should teach extra skills other than the trade area to trainees with disabilities to help them function independently as adults.

Table 4.7: Other skills taught (N=12)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guidance and counseling</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>PE training</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Bible study</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Life skills</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Did not teach</td>
<td>7</td>
<td>58.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
Out of the 12 respondents, 5 representing (41.7%) taught other skills which included guidance and counseling, physical education (PE) training, entrepreneurship, bible study and life skills. Two respondents who had indicated that they taught other skills did not indicate the skills they taught, therefore, joined the five in table 4.6 who did not teach other skills. The teaching of other skills supports Patanjali (2005) who advices that trainers should have guidance and counselling skills so that they help trainees with disabilities make the best choices in courses they choose.

4.2.4 Relevance of Other Skills Taught

The question was intended to find out the importance of the additional skills that were taught.

Table 4.8: Relevance of other skills taught  \( (N=12) \)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>helps in enhancing good public relations</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>Application of technology in general</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Ensures self employment</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Helps me to deliver better</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Did not teach</td>
<td>7</td>
<td>58.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

In table 4.8, 2 representing (16.7%) of the instructors indicated that the other skills offered at the institute helped to enhance good public relations, 1 (8.3%) felt that the skills helped trainees in application of technology in general, 1 (8.3%) indicated that they ensured self employment and 1(8.3%) felt that the skills helped the trainees to deliver
better. The findings of the study supports Wamocho (2003) who points out that guidance and counseling, independent living skills and life skills should be taught alongside trade areas to help the trainees with PDs to adjust to their handicapping conditions.

4.2.5 Improving the Skills Training

An open-ended question sought to find out how the trainees would like their training improved with the aim of possibly mentioning more courses they would prefer added.

Table 4.9: Improving the skills training (N= 44)

<table>
<thead>
<tr>
<th>How would you like your training to be improved?</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add more courses</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Improve by inviting employers &amp; possible customers of their product</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>More attachments</td>
<td>3</td>
<td>6.8</td>
</tr>
<tr>
<td>Provide modern tools/machines</td>
<td>17</td>
<td>38.6</td>
</tr>
<tr>
<td>Employ more trainers</td>
<td>8</td>
<td>18.2</td>
</tr>
<tr>
<td>Teachers should be more punctual</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Provide security and better diet.</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Provide capital when leaving</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>Adapt tables &amp; chairs for the PD</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>To be trained on new designs in tailoring and dressmaking</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>Did not teach</td>
<td>5</td>
<td>11.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

As indicate in table 4.9, 2 representing (4.5%) suggested more courses to be offered in order to improve their training. This supports Ibuathu (2005) who noted that training centers covered a narrow spectrum of skills needed in the rural areas and specifically, the local communities. Two (4.5%) wanted the management to be inviting possible
employers and customers to see the products they made during the course of training. Three (6.8%) wanted the management to ensure more attachment opportunities. The majority 17 (38.6%) preferred to have modern tools and equipment. Eight (18.2%) felt that employing more trainers would improve the training. Two (4.5%) felt that trainers would improve training by being more punctual. A further 2 (4.5%) felt that tailoring and dressmaking department should improve by introducing new and modern designs that are currently in the market to the already existing ones. One (2.3%) felt that tables and chairs should be adapted for use by trainees with PD. Suggestions on how to improve skills training supports Murray (1998) and United Nations Economic, and Social Commission for Asia and the Pacific (2002) who observed that provisions of a variety of skills reduces barriers for trainees.

4.3 Relevance of Skills to the Market

4.3.1 Ensuring the Relevance of the Courses

A question on relevance of courses sought to find out how the managers of the institution ensured relevance of the courses to the dynamics and ever changing job market. The Manager of Nyandarua pointed out that the institute had shifted from traditional and historical courses like metalwork to new ones like electrical engineering. They had also introduced hairdressing and beauty therapy which had not been there before as well as computer technology and entrepreneurship. The name of the institute had also been changed from Nyandarua Vocational Rehabilitation Centre to Nyandarua Institute of Rehabilitation and Vocational Training. This was meant to reduce stigma associated with
disabilities and make it competitive with other institutes as they integrated trainees without disabilities to support the change of name, this is what the manager had to say:

People had a negative perception of the institute. They referred to it as ‘gwa Cionje’ meaning ‘the place for the disabled’. This made it very difficult for us to start integration of trainees without disabilities. The changes have made it possible to integrate and now trainees with and without disabilities compete and assist each other.

At Muriranjas, the manager noted that they planned to make the training more relevant by replacing old machinery with modern and highly advanced ones. However, the institute was still hanging on to the traditional courses due to the nature of trainees admitted, some with no basic education at all. Other relevant courses like ceramics were not offered because very few trainees applied for them, and the Kenya National Examination Council (KNEC) required that a centre could be an examination centre with not less than 10 trainees.

In an interview with officers from the NCPWD who were charged with the responsibility for placement of trainees after training, reported that they had representatives at the Ministry who should advice on marketable courses but were not doing so. The placement officer noted that that they had initiated a program to assist in curriculum development for vocational training centers where courses to be offered would be relevant to market needs. The four-interviewed officers noted that the council not so far done anything as far as relevance of the courses to the market was concerned. This conforms with GoK (2005) that the skills in Kenyan vocational training centers were not responsive to the demands in the market.
4.3.2 Market Survey and Curriculum Involvement

During the separate interviews with officers from NCPWD, questions on curriculum involvement, relevant courses, market demand and market survey were asked with the intention of finding out the council’s involvement being the body that mainstreams and places PWDS after training.

According to the mainstreaming officer, the NCPWD did not advice on courses that were relevant to market demands. The council only trained PWDS groups on dynamics of the market and how to carry out needs assessment. The training and placement officers pointed out that plans were underway to start carrying out market surveys in order to know the market trends. One of the officers had the following to say:

NCPWD does not carry out actual surveys, neither does it advice the Ministry or the institutes on the courses to offer. We have however found a great need in being more involved. On many occasions, we have placed trainees in jobs they did not train. We have already proposed that we have a representative in the education sector whose work will be to carry out market surveys and advice the institutes. This is a proposal that has been passed and is in the pipeline to be initiated in our next financial year.

At the time of the study, the council had depended on the recommendations from managers in placing the trainees. For those who wished to start self-employment, assistance was not given to individuals but to groups. NCPDW advised the graduates to join existing groups or form new ones, then apply for funds by writing a proposal. They were then funded and trained on how to assess the market needs and trends. The officers
interviewed agreed that it was a failure in their part because they trained on market assessment after the trainees were through with their training.

NCPDW felt that other organizations of and for PWDS which are involved in placing and mainstreaming of disability issues should be involved in curriculum development for vocational training institutes for PWDS. These organization included Association of Persons with Physical Disabilities (APDK), United Disabled Empowerment Kenya (UDEK), the National Fund for Persons with Disabilities, (NFPD) and all other organization in all areas of disabilities. From the findings of this study, it is clear that no market surveys are carried out to ensure relevance of the skills to the market. UNESCO, (2002) states that determining the demand for skills is best achieved through labour market information systems and survey instruments. The findings of the study differ with UNESCO, (2002) who found out that Australia and Iran visits were made to various workshops and exhibitions to find out the market demand.

4.3.3 Training and Attachments

The questions sought to find out whether trainees went on attachment. This was important because it would make the training more relevant to the market need as trainees got first hand experience.
Table 4.10: Training and attachments (N =44)

<table>
<thead>
<tr>
<th>Do you go for attachment?</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>22</td>
<td>50.0</td>
</tr>
<tr>
<td>No</td>
<td>20</td>
<td>45.5</td>
</tr>
<tr>
<td>Did not respond</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.10 shows that 22 representing (50%) of the respondents went for attachment while 20 (45.5%) did not go for any attachments. The 22 (50%) respondents who went for attachments stood better chances of getting a first hand experience of the market which would raise their confidence on the job. Lack of attachment, for the 20 (45.5%) respondents denied them an opportunity to experience what to expect in the market. Relevance of their skills was therefore not being tested. It is very important link trainees to local firms so that they can come to terms with not only the experience needed but also any challenges that may be expected at the work places. This will also give employers a chance to carry our modifications that may be needed.

4.3.4 Importance of Attachment

A question in the trainees’ questionnaire sought to find out if the respondent understood the importance of attachment which makes training more relevant to the job market.

Table 4.11: Importance of Attachment (N=44)

<table>
<thead>
<tr>
<th>How does attachment help you?</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get experience</td>
<td>18</td>
<td>40.9</td>
</tr>
<tr>
<td>Improve skills</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>No responses</td>
<td>24</td>
<td>54.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
Table 4.11 indicates that 18 representing (40.9%) of the respondents stated that they got experience while on attachment, 2 (4.5%) stated that attachment helped them to improve their skills. Twenty-four (54.5%) of the respondents did not respond to this question as they did not go for any attachment as noted earlier. Attachment offered an opportunity for on-the-job training. Murray (1998) notes that this is an important method of instruction that is essential to the success of training. As noted earlier, employers also have a chance of making modifications as the law requires that 5% of the employment vacancies be reserved for persons with disabilities.

4.3.5 Length/Duration of the Course

A question on duration on the courses was asked with the intention of finding out how long the courses took.

Table 4.12: Length/Duration of the Course (N=44)

<table>
<thead>
<tr>
<th>Course duration</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 year</td>
<td>2</td>
<td>4.5</td>
</tr>
<tr>
<td>1.5 years</td>
<td>13</td>
<td>29.5</td>
</tr>
<tr>
<td>2 years</td>
<td>25</td>
<td>56.8</td>
</tr>
<tr>
<td>Three years</td>
<td>1</td>
<td>2.3</td>
</tr>
<tr>
<td>No responses</td>
<td>3</td>
<td>6.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.12 indicates that 25 representing (56.8%) of the respondents took 2 years in their training. Thirteen (29.5%) took one and half years, 2 (4.5%) took 3 years. During the separate interviews with the managers, the courses took between eighteen months to three years. At Nyandarua, the courses were restricted to two years. However, this duration
was determined by the capability of the trainees in acquiring the skills. Some trainees took longer than others. According to the manager of Nyandarua vocational centre, restricting them to two years was meant to create space for others. Those who did not acquire skills within the two years were terminated. The findings concurs with Khatoon (2004) who states that, training of trainees with PDs is not effective due to the fact that the duration taken is the same as that of those without disabilities.

4.3.6 Follow-Up Programme and Ensuring Competencies of the Trainees

Questions for the manager had the purpose of finding out whether the institutes had any follow-up programmes and how well they thought their graduates were ready for the job market. The findings would bring out the relevance of the skills to the job market. During the interview with the manager of Muriranjas, it was noted that no follow up had been done to find out how the former trainees were doing in the job market. The manager of Muriranjas noted that they only wrote recommendation letters to NCPWD who then assisted them in either starting self-employment or getting jobs. This differs with Afeti (2004) who notes that tracer studies which track the destination of former trainees can provide useful feedback for institutions to revise programme to enhance trainees employability. At Nyandarua, the manager stated that they made follow-up only to a few whom the institute was able to link up with.

Asked how they ensured that the trainees were competent and ready for the job market, the manager of Muriranjas noted that the trainees did trade tests, which ensured that they
were competent. For those that got to that level of examinations, the work they did was impressive. During the observation, the researcher found very impressive products from the trainees. However, only a few were able to take the trade test. Those that do not do trade test leave without the necessary skills. This is because the institutes wanted to create space for more who may be reporting. At Nyandarua, the manager reported that some trainees did very well. He noted that there were a few success stories of former trainees, one from Electrical Engineering department, was at the time working in Nyahururu town. Another one from hairdressing and beauty had been employed as an instructor in another vocation rehabilitation and training centre, and one from knitting had secured a good job at an Industry in Nakuru.

4.4 Qualification of Instructors

4.4.1 Level of Professional Qualification

The question for the instructors was intended to find out the level of qualifications of the instructors in their trade areas.

<table>
<thead>
<tr>
<th>Professional qualification</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>4</td>
<td>33.3%</td>
</tr>
<tr>
<td>Diploma</td>
<td>6</td>
<td>50.0%</td>
</tr>
<tr>
<td>Short courses</td>
<td>1</td>
<td>8.3%</td>
</tr>
<tr>
<td>No Certificate</td>
<td>1</td>
<td>8.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.13 shows that 4 representing (33.3%) of the respondents had certificate in their trade areas, while 6 (50%) had a diploma in their trade areas. One (8.3%) had short course certificate while another 1 (8.3%) had no professional certificate.
This was further confirmed by the managers of the two institutions during the separate interviews. The manager of Nyandarua centre reported that all the six staff members were qualified in the trade areas. At Muriranjas however, the manager reported that only two out of the six instructors were professionally qualified in their trade areas and that a small number had no certificate at all. These were former trainees who had been retained after training to act as trainers of trainees.

4.4.2 Experience in Training

The question was intended to find out the experience of the instructors from the number of years they had been instructing PWDs.

Table 4.14: Experience in instructing (N = 12)

<table>
<thead>
<tr>
<th>No. of years as an instructor</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 yrs</td>
<td>7</td>
<td>58.3</td>
</tr>
<tr>
<td>6-10 yrs</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>11-15</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>16 and above</td>
<td>3</td>
<td>25.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.14 shows that 7 representing (58.3%) of the respondents had an experience of between 1-5 year, 1 (8.3%) had between 6-10 years, another 1 (8.3%) had an experience of 11-15 years. Three (25%) had an experience of 16 years and above. From the interview with the manager of Muriranjas vocational center it was clear that the 3 (25%) of the instructors with long experience might have been those retained after training in
the institution in the late 1970s. The findings showed that the 7 (58.3%) of the instructors had experience of about one to five years only in training trainees with PD.

4.4.3 Knowledge and Skills in Special Needs Education

A question on SNE training was asked with an intention of finding out if trainers had prior knowledge in SNE.

Table 4.15: SNE training (N = 12)

<table>
<thead>
<tr>
<th>Do you have training in special needs?</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>6</td>
<td>50.0</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>50.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.15 indicates that 6 representing (50%) of the respondents had some training in SNE, while 6 (50%) had no training in SNE. This concurs with Kimathi (2009) who noted that KTTC which trains vocational instructors had lecturers who had no knowledge in SNE. This meant that they did not teach any SNE skills and knowledge to the students who later taught in the vocational institutes.

Table 4.16: Level of SNE training  (N = 12)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>A weeks seminar</td>
<td>41.7</td>
</tr>
<tr>
<td>Certificate in SNE</td>
<td>8.3</td>
</tr>
<tr>
<td>No responses</td>
<td>50.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
Table 4.16 shows that 5 representing (41.7%) of those who had some training in SNE had attended a weeks seminar while 1 (8.3%) had a certificate training in SNE. During the interviews with the managers of the institutions, it was further confirmed that the instructors had no training in special education. Only a few from Muriranjas had attended a few days’ seminars on sensitization of special needs education. These seminars were however done in the 1980s when the institutions were under the management of ILO.

A similar question was asked on SNE in-service training. The question was also intended to find out the qualification of instructors as far as SNE was concerned. The manager of Muriranjas vocational centre when asked about SNE in-service training for instructors had this to say:

The institute can not afford to organize any in-service training and seminars for instructors. The funds allocated to institute are never enough. We depend on the knowledge attained by those who were lucky to attend the ILO seminars organized in the 1980s.

At Nyandarua, the situation was the same. However, the manager organized a two to three days seminar for instructors on issues of disability like HIV management and disability, first Aid for trainees with disabilities and sporting/exercises for trainees with disabilities. This finding differs with ILOs (1983) recommendation that persons involved in vocational training of PWDs should have adequate knowledge of disabilities and their limiting effects. The findings also differ with Billingsley (2005) who recommends an opportunity for staff development to update instructors with issues of disability.
4.4.4 Categories of DisabilitiesHandled by Instructors

The question sought to find out different categories of disabilities that instructors handled at the institutes.

Table 4.1: Categories of disabilities retrained by instructors (N= 12)

<table>
<thead>
<tr>
<th>Categories</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physically disabled</td>
<td>7</td>
<td>58.3</td>
</tr>
<tr>
<td>Physically and mentally disabled</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>Physically, mentally &amp; visually disabled</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>All the above disabilities</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

According to the findings in table 4.1, 7 representing (58%) of the respondents had trained trainees with PDs, 2 (16.7%) had trained the trainees with PDs and those with mental disabilities, 2 (16.7%) had trained trainees with PDs and other with visual disabilities, while 1 (8.3%) had trained trainees with PDs, trainees with MDs and trainees with visual disabilities. The ability to train trainees with disabilities might have been as a result of experience. From the interviews with the managers, the institutes were initially meant for trainees with PDs before later introducing the admission of trainees with other categories of disabilities. This explains the reason why all the respondents had at least trained trainees with PDs. The training of trainees of different types of disabilities at the same time posed a lot of challenges. This explains the greater need of Instructors having knowledge in SNE.
4.4.5 Measures to Ensure Trainees Perform Independently

The question purposed to find out measures that instructors took to ensure trainees performed the skills learnt independently. This would show how relevant the skills were.

Table 4.18: Measures to ensure that trainees perform independently (N = 12)

<table>
<thead>
<tr>
<th>How would you ensure trainees perform skills independently</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>By allocating more time for practical</td>
<td>3</td>
<td>25.0</td>
</tr>
<tr>
<td>By giving evaluation tests</td>
<td>4</td>
<td>33.3</td>
</tr>
<tr>
<td>By giving individual attention</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td>By ensuring they complete two years of training</td>
<td>1</td>
<td>8.3</td>
</tr>
<tr>
<td>Did not respond</td>
<td>2</td>
<td>16.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 4.18 shows the measures that the respondents took to ensure trainees performed skills taught in their trade areas independently. Three representing (25%) of the respondents reported that they allocated more time to practical work. Four (33.3%) gave evaluation tests, 2 (16.7%) give attention to each individual while 1 (8.3%) ensured that they completed the two years course. Performing independently meant that trainees would be independent in the job market. 2 (16.7%) did not respond to this question. As noted earlier, these respondents may have been those former trainees who had no professional qualifications but had experience of having been retained in the institutions.

4.5 Adequacy and Appropriateness of Resources, Physical Facility and Equipment

This section sought to find out the adequacy, availability and appropriateness of human and physical resources as well as physical facilities and equipment.
4.5.1 Staff Establishment, Enrolment and Admission Criteria

From the managers’ interview schedule, questions on enrolment, staff establishment and admission criteria were asked with the purpose of finding out the adequacy of the human resource.

The managers of the two institutions pointed out that each institute had six members of the teaching staff. The enrolment at Muriranjas vocational center was 45 while Nyandarua vocational center had an enrolment of 87 trainees at the time of the interview. Asked how the trainees were admitted, the managers stated that admission was continuous and was done anytime that a trainee reported. Trainees admitted were of all categories of disabilities. Those with disabilities were admitted on a 60% basis and those without disabilities were admitted on a 40% basis of the total population. From the findings of the courses offered, the institute admitted to offer an approximate of seven courses and other additional skills. This therefore meant that the staff (6 in each institute) were not adequate and this made it difficult to deliver effectively and achieve relevance.

The manager of Nyandarua had this to say:

The teaching staff is very inadequate. The institute has one instructor per workshop. All the workshops have trainees at different levels of skill acquisition. This is because, we admit trainees at any time they report. Staffing is our greatest challenge.

4.5.2 Ratio of Instructors to Trainees in Trade Areas

A question to the instructors was asked with the aim of finding out the adequacy of the human resource in relation to the number of trainees.
Table 4.19: Ratio of Instructors to Trainees in trade areas

<table>
<thead>
<tr>
<th>Courses</th>
<th>Nyandarua (N = 6)</th>
<th>Muriranjas (N = 6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of</td>
<td>No. of</td>
</tr>
<tr>
<td></td>
<td>trainers</td>
<td>trainees</td>
</tr>
<tr>
<td>Electrical engineering</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>Hairdressing and beauty therapy</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Knitting</td>
<td>2</td>
<td>30</td>
</tr>
<tr>
<td>Clothing and textile/tailoring and dressmaking</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Computer</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Shoe making and leather work</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Welding and general fittings</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Carpentry</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Agriculture</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 4.19 shows that the ratio of instructors to trainees in electrical engineering was 1:13 in Nyandarua, hairdressing and beauty therapy 1:15 in the same institution. In Muriranjas the ratio of trainers to trainees in knitting and tailoring was found 1:12 respectively. The findings showed that the ratio of trainees to trainers is approximately 1:15 which is high due to fact the trainees have physical disabilities of different levels and are at different levels of skill acquisition at any one time. This was similar to the findings of Murray (1998) who found out that the ratio of instructors to trainees was 1:18, which would be hard to manage.

4.5.3 Financial Resources

The researcher wanted to find out the availability and sources of financial resources to run the institutions. The two managers, during the separate interviews stated that the Ministry of Gender, Children and Social Development funds the training centres although
the funds are always insufficient. The two institutions substitute with cost sharing with parents, many of whom are not able to pay. Lack of financial resources meant that the institutes could not employ more instructors, or buy quality materials for training purposes. The findings support GoK (2005) which states that, financing of vocational training for PWDs still remains a challenge for the government of Kenya.

4.5.4 Appropriateness, Adequacy and Availability of Physical Facilities and Equipment

A question on the availability, adaptations, adequacy and appropriateness of physical facilities and equipment was asked. The managers in both institutions noted that very little had been done as far as adapting facilities was concerned. At Nyandarua vocational centre, the manager had this to say:

We have not adapted any of the furniture for use by trainees with physical disabilities. All the chairs and tables are standardized. We are however thinking of doing some adjustment in some workshops which will be done when funds are available.

It was also noted during observation that most of the students on wheelchairs remained on them throughout the instructions. At Muriranjas, however, a few adaptations on the height of tables were noted. Time taking during examinations for those who were very slow due to their PD was also increased significantly. It was noted that adaptations may have lacked due to lack of knowledge in SNE among the instructors. The findings do not support the requirement of ensuring seating needs for trainees with PD (Academic Accommodations for Students with Disabilities, 2002).
A general observation of the workshops at Muriranjas and Nyandarua are represented in table 4.20 and 4.21.

**Table 4.20: Observation of the workshops at Muriranjas**

<table>
<thead>
<tr>
<th>Condition of workshops</th>
<th>Good</th>
<th>Average</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools and equipment</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adaptations</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adequacy of tools and equipment</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Condition of tools and equipment</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

The workshops had enough space for the number of trainees present. The workshops had proper lighting and ventilation. Water and electricity were available. The workshops had wide doors and paths from one workshop to the other were concrete. However, most of the machinery and equipment were inadequate, old, and outdated especially those in the leatherwork and shoe making workshops. As noted earlier, very little adaptations had been put in place. There were no first aid kits in the workshops. Generally, the workshops in this institute were under-utilized due to the small enrolment of 45 trainees.

**Table 4.21: Observation of the workshops at Nyandarua vocational rehabilitation centre**

<table>
<thead>
<tr>
<th>Condition of the workshops</th>
<th>Good</th>
<th>Average</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools and equipment available.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenances adaptations</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adequacy of tools and equipment</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Condition of the tools and equipment</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Tools and equipment needed for the courses on offer were available in all the five workshops. They were in good order and in use. The workshops had electricity and were well lit and ventilated. However, equipment in all the workshops were not adequate for the number of students in each of them. For example, the knitting workshop had 30 trainees with only 8 knitting machines. No adaptations had been put in place for purposes of those with physical disabilities. The terrain was not easily accessible by wheelchair users due to lack of concrete paths to all areas of the institute like the dorms, the dining hall and the workshops. Many of the entrances to the workshops had no ramps which made it difficult for the wheelchair users. The workshops did not have enough space for wheelchair users. However, they had electricity and were well lit and ventilated. Water was a major challenge in this Nyandarua. The findings differ with Academic Accommodation for Students with Disabilities (2002) which stresses the importance of accessible buildings, seating needs and comfortable equipment for trainees with physical disabilities.
CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction
This chapter provides a summary of the study findings which were presented on the basis of the research objectives. It also consists of the conclusions made and recommendations for future implementation and suggestions for further research in education.

5.1 Summary
5.1.1 Type of Vocational Training
The study found out that the courses on offer at Muriranjas vocational rehabilitation and training centre were knitting, tailoring and dressmaking, shoe making and leather work, welding and general fittings, and wood work and carpentry. Agriculture and guidance and counseling were compulsory courses for all trainees. At Nyandarua courses offered were electrical engineering, hair dressing and beauty therapy, knitting, clothing and textile which was an improved name from tailoring and computer technology.

Other courses that were compulsory for all trainees at Nyandarua included Entrepreneurship, life skills, Bible study, computer training as well as guidance and counseling.
Most of these courses were traditional in nature and had not been reviewed. However, the institutes had included computer training, which had not taken off at Muriranjas, hairdressing and beauty which were not there earlier as well as entrepreneurship to assist the trainees mostly in setting up their own business. These courses met most of the labour market needs in Kenya. However, more needed to be done in the area of transport and communications, as well as social and personal services.

The results indicate that the trainees preferred the course they were taking due to their marketability, passion and self employment.

5.1.2 Relevance of vocational skills to the Job Market

The study found out that the curriculum had not been revised since the institutions were established. There was also no market surveys carried out to find out what was relevant to the market. The institutions and NCPWD, the body that assisted PWDS in getting jobs had no mechanisms in place to assist them know what skills were required in the market. The courses took two years just like any other institution for trainees without disabilities. Many of the trainees did not go for any attachments. This made it difficult to judge acquisition of the skills. After training, no follow up was made from the institutes to know what the former trainees were doing in the job market. The NCPWD, which mainstreams disability issues and places PWDS after training did not participate in curriculum development to determine what courses were to be offered following the dynamics of the market.
5.1.3 Qualification of Instructors

The study found out that some instructors were qualified in their trade areas, while some were not qualified. In the area of SNE, the instructors had no qualification. Only a few had attended seminars in some contemporary issues and disability. However, the study found out that some of the instructors had long experiences with PWDs. The instructors also offered guidance and counseling to the trainees that helped them in independent living.

The study also found out that the instructors trained trainees with different categories of disabilities despite having no training in special education. Most of the instructors trained between 10-12 trainees per workshop. This translated to a ratio of 1:12. The trainees were always at different levels of training due to the fact that admission was continuous. This posed a big challenge to the instructors.

5.1.4 Availability and Appropriateness of Resources

The finding of the study on resources was that, the two institutions did not have enough equipment in the available workshops. Those that were available were not adapted for use by trainees with PD. Many of the machines available especially at Muriranjas vocational rehabilitation centre were old and outdated. Despite the government funding the institutes and the parents cost sharing, the funds were still insufficient.
Staff establishment was found to be very low. Each of the institutions had six instructors, which was insufficient for the number of trainees handled in each workshop. It was also discovered that the instructors trained trainees who were at different levels of skill acquisition due to the nature of admission and disability.

The centres were found to have poor accessibility for those on wheelchairs. Findings also revealed that lack of financial resources prevented the institutes from making any follow ups to know the state of the former trainees.

5.2 Conclusion
From the foregoing summary, it was established that Muriranjas and Nyandarua vocational training centres offered courses that were relevant to the local and national market demands. However, the institutions experience many challenges which led to some of the trainees living without having done trade test. This, therefore, meant that they left without the necessary skills needed in the job market. This explains why many did not transit to employment either formal or informal, or were in employment for jobs not trained for. Some of the challenges that the two institutes experienced were lack of any revision on the courses offered to include more that were more marketable in the current job market.

The NCPWD that is charged with the responsibility of placing and mainstreaming PWD did not take part in curriculum development of vocational skills for PWDS. There were
no market surveys carried out either by the NCPWD or the institution management. The staff in both institutions was insufficient and half of them were not well trained in their trade areas. Only a few had some training in the area of SNE.

The institutions did not have sufficient equipment in the workshops. Those available were unadapted, old and outdated. The institutions had not been receiving enough funds from the government. This led to them not introducing other courses that were more market relevant and not adapting materials. Many issues that would lead to courses that were relevant were wanting. It is on this basis that the following recommendations have been suggested.

5.3 Recommendation

Based on the research findings, the researcher came up with the following recommendations to the Ministry of Gender, Children and Social Development, the NCPWD, curriculum developers, instructors and managers of the institutions.

i. Types of vocational training

- Curriculum for vocational training for trainees with PDs should be constantly reviewed and more marketable courses added in order to motivate trainees, and that will assure them of employment.

- Institutions and NCPWD should carry out market surveys and advise the curriculum developers on the need to review courses to be relevant to the market.
ii. **Relevance of vocational skills to the job market**

- Ensure that technology is employed in their training by use of modern and up to date machinery.

- Follow-ups of the former trainees who have been placed in employment should be made to find out how they are faring in the job market. This will assist in revision of courses offered and improve skills training.

- Managers should try to link up with local firms where trainees can be absorbed for attachment as attachment enables trainees to receive hands-on skills and experiences.

iii. **Qualification of instructors**

- Trainers and managers must get training in special needs education in order to acquire knowledge that will empower them to work effectively with trainees with disabilities and adapt training equipment and facilities.

- In-service training for staff development should be initiated to serve as refresher courses for instructors who had attended seminars many years back as well as those without the qualifications that are needed.

iv. **Adequacy, appropriateness and availability of resources**

- Admission criteria should be reviewed to allow trainees with at least basic education. This will encourage parents to take their children with disabilities to
primary schools which should be free and compulsory for all. Admission should be at specific time to make the training manageable for the instructors.

- Sufficient funds should be availed to the institutions to make it possible for the institutes to buy modern up-to-date equipment and adapt them for use by trainees with PDs in line with new technology.
- More instructors should be employed and duration of training the courses be reviewed as lack of that may hamper the acquisition of the relevance skills.

5.4 Suggestions for Further Research

The researcher made some suggestions for further research as follows:

- More research should be carried out in vocational training in other categories of disabilities in the rural vocational rehabilitation centres.
- Further research should be carried out to find out if vocational training is started in special primary and secondary schools to prepare those that cannot continue with higher education.
- Further research should be carried out to find out the state of the former trainees of rural vocational rehabilitation centres in and out of employment.
REFERENCES


UNESCO, (1977). *Integration of Vocational education into special education; Austria, Colombia, Iran and Tunisia*. France: UNESCO.


APPENDICES

Appendix A
Questionnaire for Instructors

This questionnaire seeks to find out the relevance of the skills offered to trainees with physical disabilities. The information will be used for research purpose only and your response would be confidential. Please respond to the questions as accurately as possible.

Where there are options, tick the appropriate choice.

Section A: Background information

1. Gender:  Male  Female

2. Highest academic qualification?
   
   KCPE  KJSE  KCSE  KACE

Section B

3. Level of professional qualification.
   
   Certificate
   Diploma
   Degree

   Others – specify .................................................................

4. What is the name of the course you instruct?............................................

5. Do you train any other skills other than your trade area? Yes  No
   
   a) If yes what areas? Specify
   .................................................................
   .................................................................
b) How are the above skills relevant to the trainees?

6. How many trainees do you instruct in this trade area?.................................

7. How long have you instructed trainees with disabilities?..............................

8. What categories of disabilities have you handled in your training career?

   The physically handicapped ☐
   The mentally handicapped ☐
   The visually handicapped ☐
   The hearing impairment ☐

9. a) Do you have any training in special needs education? Yes ☐ No ☐

   b) If yes what level?

   Less than a week’s seminar ☐
   A week’s seminar ☐
   Certificate in SNE ☐
   Diploma in SNE ☐
   Bachelor degree in SNE ☐
   Masters degree in SNE ☐

10. How do you ensure that your trainees can perform these skills independently?

    ..........................................................................................................................
    ..........................................................................................................................

    Thank you for your cooperation.
Appendix B

Questionnaire for Trainees

This questionnaire seeks to get information on the relevance of skills offered to trainees with physical disabilities. The information will be used for research purposes only and your responses will be highly confidential. Please answer as accurately as possible.

Section A: Background information

1 Gender: Male □ Female □

2 Highest level of schooling
   Primary 8 □ Secondary □
   Did not complete primary □ Did not complete secondary □

Section B: Meeting the aspirations and needs of trainees

3 What course are you taking? .................................................................

4 Why did you prefer the course you have indicated above? ....................
   ........................................................................................................

5 How long does the course take? .......................................................

6 (a) Do you go for attachment? Yes □ No □
   (b) How does attachment help you? ....................................................

7 How would you like your training to be improved? ............................
   ........................................................................................................

Thank you for your cooperation.
Appendix C

Interview Guide for the Institutions Manager

The interview guide seeks to gather information about the institution and relevance of vocational training for student with physical disabilities. The information will only be used for the purpose of the study.

1. In which year was the institution established and what is the enrolment?
2. What is the criterion for admitting students?
3. Where does the institution get its funding from?
4. What categories of disabilities do you admit in the institution?
5. Do you have adequate teaching staff or instructors?
6. Do they have any training in special needs education?
7. Do you organize any in-service training in special needs education to make the staff better able to cope with students with disabilities?
8. What courses does the institution offer?
9. How long does each course take to complete and is the duration adequate?
10. How well do you think the institution prepares students with ph for the world of work?
11. Does the center follow up its graduates to ensure they are placed somewhere in either self of formal employment.
12. Does the institution help its graduates in getting jobs or starting their self-employsments?
13. Since the job market is dynamic and keeps changing what do you do to make sure that courses offered are relevant to current job markets?

14. How do you adapt the tools and equipment for use by the PH?
Appendix D

Observation Checklist in the Workshop

1. How many workshops are there in this center

..........................................................................................................................

2. What is the capacity of each workshop?
   a. ..........    b. ..........    c. ............
   d. ............    e. ............    f. ............

3. Are the workshops fully equipped for relevant trades?
   a. ..........    b. ..........    c. ............
   d. ............    e. ............    f. ............

4. What is the general condition of the workshops?

<table>
<thead>
<tr>
<th>Condition of w/s</th>
<th>Good</th>
<th>Average</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools &amp; equipment available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenances</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adaptations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adequacy of tools &amp; equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Condition of the tools &amp; equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Other services in the workshops

<table>
<thead>
<tr>
<th>Service</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toilets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First-aid kits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire extinguishers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proper lightening &amp; ventilation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Trainer/ trainee ratio

7. Adaptations and utilization of the equipment and tools for use by learners with physical disabilities

8. Utilization of space

9. Environmental accessibility-wide doors, Concrete paths, lump

10. Any other observation that may be made related to the study
Appendix E

Interview Guide for NCPWD Officers

This interview guide seeks to gather information on the labour market demands and how responsive training programmes are to the demands

1. Are you involved in issues of curriculum development for vocational training programmes?

2. How do you ensure that the vocational programmes offer relevant courses which would assist in placing of trainees in available jobs?

3. For those who wish to start small-scale self-employment after training, do you advise them on demand in the market?

4. Do you carry out market surveys to ensure that the trainees have relevant skills needed?

5. What are the challenges do you encounter in your effort to mainstream disability issues?

6. In your opinion, what should be done by the stake holders involved?

Thank you for your cooperation.
Appendix H

Permit

THIS IS TO CERTIFY THAT:

Dr. Wairimu Githaga

Kenyatta University

P.O. Box 43844-00100, Nairobi,

has been permitted to conduct research in

Location

District

Counties

on the topic: Relevance of vocational skills for trainees with physical disabilities to market demands at Muririanjas and Nyandarua Centres, Muranga and Nyandarua Counties, Kenya,

for a period ending: 28th February, 2013.

CONDITIONS

1. You must report to the District Commissioner and the District Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit.

2. Government Officers will not be interviewed without prior appointment.

3. No questionnaire will be used unless it has been approved.

4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.

5. You are required to submit at least two (2) or four (4) bound copies of your final report for Kenyans and non-Kenyans respectively.

6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice.

GPK50853m10/2011

(Conditions see back page)