ENHANCING TRAINING OF SEWING SKILLS AMONG PERSONS WITH PHYSICAL DISABILITIES: A CASE OF PROVIDENCE CHESHIRE HOME NKOKONJERU UGANDA

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DECLARATION

I, **MATINYI VERONICA,** declare that this thesis is my original work and has never been presented for a Masters Degree in Vocational Institution of higher learning.

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DEDICATION

To the memory of my late Father, May his soul rest in peace. It is he who taught me by word and deed, deliberately encouraged me to read hard for my future.

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LIST OF ACRONYMS

BTVET	:	Business, Technical, Vocational Educational and Training
CWDs	:	Children with Disabilities
EFA	:	Education for All
GTZ	:	German Agency for Technical Cooperation
KYU	:	Kyambogo University
MOE&S	:	Ministry of Education and Sports
MVP	:	Masters in Vocational Pedagogy
NCDC	:	National Curriculum and Development Centre
NOMA	:	Norwegian Masters Abroad
NORAD	:	Norwegian Agency for Development
NUDIPU	:	National Union of Disabled Persons of Uganda
MOH	:	Ministry of Health
PD	:	Physical Disabilities
PWDS	:	Persons with Disabilities
SNE	:	Special Needs Education
TVET	:	Technical, Vocational Education and Training
UNEB	:	Uganda National Examinations Board
UNESCO	:	United Nations Educational Scientific and Cultural Organization
UNAPD	:	Uganda National Action on Physical Disability
UNISE	:	Uganda National Institute of Special Education
UPE	:	Universal Primary Education
USDC	:	Uganda Society for Disabled Children
VET	:	Vocational Education and Training
VP	:	Vocational Pedagogy
Wow	:	World of Work

TABLE OF CONTENTS

DECLARATION i

APPROVAL BY THE SUPERVISORS ii

DEDICATION iii

ACKNOWLEDGEMENT iv

LIST OF ACRONYMS v

LIST OF FIGURES xii

LIST OF APPENDICES xiii

ABSTRACT xiv

CHAPTER ONE: INTRODUCTION 1

1.0 Introduction 1

1.1 Background to the study 1

1.1.1 Personal background 11

1.1.2 Motivation for the study 11

1.2 Statement of the problem 12

1.3 Purpose of the study 13

1.4 Specific objectives of the study 13

1.5 Research questions 13

1.6 Scope of the study 14

1.6.1 Content scope 14

1.6.2 Geographical scope 14

1.6.3 Time scope 14

1.7 Justification 14

1.8 Significance of the study 15

1.9 Study Limitations 16

1.10 Definition of operational concepts / terms 16

1.11 Outline of the study 17

CHAPTER TWO: REVIEW OF RELATED LITERATURE 18

2.0 Introduction 18

2.1 Theories underpinning learning 18

2.2 Assess whether or not the methods used for training persons with physical disabilities in sewing skills are appropriate. 21

2.2.1 Teaching and learning strategies 21

2.2.2 Field work/placement 23

2.2.3 Assessment and evaluation of the learning process 24

2.3 Examine the ways by which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work. 26

2.3.1 Curriculum as a steering "tool" 26

2.3.2 Future World of Work 28

2.4 How the tools and materials used in training persons with physical disabilities equip them with sewing skills to be productive in the world of work. 29

2.4.1 Tools and materials 29

2.4.2. Assistive Technology/devices 30

2.5 How the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work 33

2.5.1 Assessment and development of assessment tools 34

2.6 Summary of Literature Review 35

CHAPTER THREE: METHODOLOGY 37

3.0 Introduction 37

3.1 Research Design 37

3.2 Study area 37

3.3 Study Population 38

3.4 Sample size 38

3.5 Sampling strategy 39

3.6 Data collection methods 40

3.6.1 In-depth interviews 40

3.6.2 Focus group discussion 40

3.6.3 Documentary analysis 41

3.7 Instruments 41

3.7.1 Research objective one. 41

3.7.2 Research objective two. 42

3.7.3 Research objective three. 42

3.7.4 Research objective four. 43

3.8 Procedure of Data Collection 43

3.9 Validity and Reliability of instruments 43

3.9.1 Validity 44

3.9.2 Reliability 44

3.10 Data organisation, processing, analysis and presentation 45

3.11 Ethical issues 45

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS 47

4.0 Introduction 47

4.1 Response Rate 47

4.2 Demographic Information of the respondents 48

4.2.1 Age distribution of the respondents 49

4.2.2 Gender of respondents 49

4.2.3 Length of service 50

4.3 Data analysis and interpretation of objective one 50

4.3.1 Determination of choice of methods used in training 51

4.3.2 How instructors support students to learn effectively 54

4.3 3. Challenges encountered in using the above methods 55

4.4 Data analysis and interpretation of objective two. 56

4.5 Data analysis and interpretation of objective three 59

4.5.1 Students and instructors' views on use of the tools and materials 60

4.6 Data analysis and interpretation of objective four 60

4.7 Respondents' views on the work-related activities for training learners with physical disabilities in vocational skills 63

CHAPTER FIVE: DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS ... 65

5.0 Introduction 65

5.1 Discussion 65

5.1.1 Assess whether or not the methods used for training persons with physical disabilities in sewing skills are appropriate. 65

5.1.2 Examine the ways by which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work. 67

5.1.3 How the tools and materials used in training persons with physical disabilities equip them with sewing skills to be productive in the world of work. 72

5.1.4 How the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work 74

5.2 Conclusion 76

5.3 Recommendations 78

5.4 Areas for further research 79

REFERENCES

APPENDICES

LIST OF TABLES

Item **Page**

Table 1: Study population, sample size and sampling.....40

Table 2: Response rate of respondents 48

Table 3: Age distribution of the respondents.....50

Table 4: Distribution of respondents by length of service.....51

Table 5: Extent to which the methods used for training persons with physical disabilities in sewing skills are appropriate.....52

Table 6 : Determination of choice of methods used in training.....53

Table 7: How instructors supported students to learn effectively 55

Table 8: Extent to which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work 58

Table 9: students and instructors' views on use of the tools 61

Table 10: Work related activities for training learners with physical disabilities in vocational skills.....63

LIST OF FIGURES

Item **Page**

Figure 1: The distribution of respondents by gender 49

Figure 2: Challenges encountered in using the above methods 55

Figure 3: The individualized method of learning intended to make learners acquire skills.. 58

Figure 4: An instructor shows a student how measurements are done for sewing. 58

Figure 5: Materials used in training persons with physical disabilities with sewing skills to be productive in the world of work 59

Figure 6: Tools used in training persons with physical disabilities with sewing skills 59

Figure 7: Work related activities for training learners with physical disabilities in vocational skills 61

Figure 8: An instructor showed a learner how to repair a sewing machine. 62

Figure 9: Learners chopped wood at the Home. 62

Figure 10: A learner showed her garden at the Home. 63

LIST OF APPENDICES

Item **Page**

Appendix I: Consent Form 88

Appendix II: Interview Guide for Instructors Training Vocational Skills in Sewing.....89

Appendix III: Interview Guide for Students Training In Vocational Skills in Sewing 91

Appendix IV: Interview Guide for Graduates Trained In Vocational Skills in Sewing.....93

Appendix V: Focus Group Discussion Guide for Students 95

Appendix VI: Record Form for Research Objectives A1, B2, C3 and D4.....96

Appendix VII: Introductory Letter From Kyambogo University 97

Appendix VIII: A Map of Uganda showing Mukono District.....97

Appendix IX: A Map of Mukono District Showing Nkokonjeru Sub-County.....98

ABSTRACT

The purpose of this inquiry was to undertake an empirical case study to find out how VET equips persons with physical disabilities with sewing skills for the world of work at Providence Cheshire Home, Nkokonjeru Sub County in Mukono District. The population comprised of 15 instructors, 80 students and 25 graduates. A sample of 50 was used for this study that included both females and males for gender balance. The study was guided by four objectives; to assess whether or not the methods used for training persons with physical disabilities in sewing skills are appropriate, to examine the ways by which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work, to find out how the tools and materials used in training persons with physical disabilities equip them with sewing skills to be productive in the world of work and to establish how the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work. The inquiry adopted a qualitative research approach and employed a descriptive research design. Methods like in-depth interview and documentary analysis were used to collect data. The major instruments used to gather the needed data were interview guides. The main findings showed that the illustration method was the most commonly used to train sewing skills for learners with physical disabilities. The outdated current curriculum and shortage of teaching tools and materials were a challenge in training work related activities. The need to educate teachers before acceptance and accommodation of students with disabilities can really occur. The need for VET tools, resources both human and materials were identified as crucial for effective education of PWDs. Integrating the concept of differentiated instruction, teaching with various techniques including basic effective communication and social interaction, showing activeness and demonstrate intensive training to set personalised goals as well as providing intensive practical information through refresher courses on what to do in classroom were identified as major recommendations. However, identifying gaps in the essential inclusive services like knowledge about the curriculum, changing technology, work attitudes as well as monitoring and evaluation of all the institutions activities are crucial for successful training of persons with disabilities.

CHAPTER ONE: INTRODUCTION

1.0 Introduction

The purpose of this inquiry was to undertake an empirical case study to find out how Vocational Education and Training (VET) equip persons with physical disabilities with sewing skills for the world of work. The study was carried out at Providence Cheshire Home, Nkokonjeru Sub County in Mukono District. This chapter presents the background of the study, personal background, motivation, problem statement, purpose, specific objectives research, questions, scope, justification, significance, and definition of terms.

1.1 Background to the study

Enhancing refers to improving the quality, value or extent of (*Encarta English Dictionary*, 2008). In this regard enhancing refers to the ability of vocational institutions to improve the training services among persons with physical disabilities; such as use of special methods, tools and materials and instructors that students require for effective quality training to take place. Then further design relevant and appropriate curriculum which meet the needs of learners with physical disabilities in their daily lives. My experiences, as a professional educator reveal that a lot of theory in various courses is emphasized at the expense of practice-based teaching/learning that has to do with the way skills and knowledge is actually used in working life. Quite often, graduates seem to know a lot of theory about the different subject content in the curriculum, but when it comes to practice they seem to have little experience on which to build when faced with practical world. (Okello, 2009: 27-28). In light of this, one ought to appreciate that the future world of work is dependent upon the demand for new skills, changing technology, work attitudes

and holding more than one job (Kikomeko, 2011). This means the institutions' curricula: teaching approaches and methods should emphasize sensitivity to learners' needs with physical disabilities in terms of theory and practice.

Among the 72 Million Primary aged children worldwide that are out of school, one third are disabled and over 90% of disabled children in Africa do not go to school at all according to *Education for All (EFA) Global Monitoring Report* (2007). As per the statistics from *Uganda National Housing and Population Census Report* (2009), the disability rate in Uganda was 4%, compared to 3.3% internationally. In Uganda many people with disabilities suffered neglect and rejection because families and communities had negative attitudes towards the approach of preparing learners for both practical and academic occupations (*MOES*, 2007:6). In Mukono District 2.8% per 1000 people per year become disabled and currently it is ranked as the fifth district in high disability rate in Uganda (*National Reconciliation and Transitional Justice (NR&TJ) Audit Research Report*, 2011-2012). It was because of these trends in disability that the struggle to meet the special needs of learners with physical disabilities in education gained momentum. The National and international disability movements supported the promotion of special needs education which aims at providing adjusted quality education not only to children with visual impairment, hearing impairment, mental retardation or physical impairment, but to all children who may, for any reason, experience temporary or permanent needs for adjusted education.

The struggle was followed by the intentions of the international concept of *Education for All (EFA)* as well as the *Universal Primary Education (UPE*, 1997) policy addressing the development of learners as whole persons including their intellectual, moral, physical, social and emotional development. The world Conference on Education

for All in Jomtien, Thailand (1990) brought in the idea of vocational education and training for learners with special needs. The conference also provided a justification to make special provisions and facilities for learners with special needs in vocational education and training institutions. Another important international instrument was the United Nations' Standard Rules on the Equalization of Opportunities for Persons with Disabilities (UNSREOPD, 1993).The rules advocated for development and supply of support services for Persons with disabilities (PWDs) including assistive devices, equipment and personal assistance and making the physical environment accessible according to the needs of PWDs as important measures to achieve equalization of opportunities. The measures could assist to increase the level of independence in their daily living and to exercise their rights accordingly.

In Uganda, the government's commitment towards persons with disabilities dates back to 1952 with the introduction of education for the blind by the British colonial government (Ssekamwa, 2000). Shortly after the 1962 independence in 1965 a data collection exercise for persons with disabilities was commissioned by the Uganda government with the support of the International Labour Organization (ILO). The study revealed that about 10% of the country's population was composed of persons with disabilities (PWDs) and about 6,000 persons in Uganda were becoming disabled annually (Ndeezi, 2004). Then the government with support from the ILO developed a National Rehabilitation Scheme to provide persons with disabilities with social and economic independence *The Uganda Educational Statistical Abstact* (2008:91). The Government of Uganda made reasonable achievements in the area of special needs education through the policy of affirmative action in favour of marginalized groups as documented in the *Constitution of the Republic of Uganda* (1995).The constitution declared that the state

shall take affirmative action in favour of groups marginalized on the basis of gender, age, disability or any other reason created by history, tradition or custom, for the purpose of redressing imbalances which existed in relation to such groups. The *Constitution of the Republic of Uganda* (1995) clearly states in article 30 that: All persons have a right to education. Introduction of *Universal Primary Education* (*UPE*, 1997), therefore was an example of the application of the affirmative action in education. In accordance with this policy, children with disabilities were given the first priority in enrollment for UPE support, just like for the girl child. This was a sign of the government's commitment towards the education of learners with physical disabilities in Uganda. The *Uganda National Institute for Special Needs Education (UNISE) Act*, (1998) was passed by the parliament of Uganda in order to promote education for learners with special needs in the government aided institutions in Uganda.

The inception of Special Needs Education further led to the establishment of organizations for and of persons with disabilities, special schools and units resulting into the formation of an umbrella organization for persons with disabilities in November 1987. The National Union of Disabled Persons of Uganda (NUDIPU) has continuously advocated for respect of the rights of persons with disabilities (Ndeezi, 2004:11-12). Another organization which promotes the vocational education and training of learners with physical disability is the Uganda Society for Disabled Children (USDC) which aims at improving the welfare of children with disabilities by supporting community rehabilitation programmes in various districts like Masaka, Masindi, among others.

The *Ministry of Health* (*MOH*, 2007) defines Physical Disability as all those impairments that affect movement and posture of a person, and is often referred to as Movement Disability. The major causes are as a result of accidents, diseases such as polio,

malaria, wars, birth defects, poor feeding/ malnutrition, poor antenatal care. The *Uganda National Action on Physical Disability* (*UNAPD*, 2009) however, defines Physical Disability as either the absence, non-function, or mal-function of a bone, a muscle, nerve, or any part of the body, resulting into the person having restricted movement, agility that is regarded ordinarily not normal or needs the support of assistive devices to move. Physical disability is further grouped by Ministry of Health as: mild, moderate and severe in Uganda the common types being: Muscular dystrophies- this means that the muscle fibres in the body gradually weaken over time; permanent injuries to the brain, spinal cord or the limbs that prevent proper movement in parts of the body; cerebral palsy which is caused by damage to the parts of the brain which control movement during the early stages of development. Cerebral palsy may involve muscle movements and weakness on one side of the body referred to as hemiplegic, in the lower part of the body a condition known as diplegia or in both legs arms (quadriplegia) and may involve problems with balance and coordination a condition known as ataxia. When the spinal cord does not develop normally during pregnancy, the child can have a physical disability called spina bifida.

When a learner has limited mobility this requires a great deal of change for instructors and in the classroom because people with physical disabilities often must rely upon assistive devices such as wheelchairs, crutches, canes and artificial limbs to obtain mobility. The inadequacy of teaching materials and the lack of special instructors tend to limit the participation of learners with physical disabilities and undermine their ability to learn effectively which has made them to become among the poorest of the poor and this is said to be worse in the rural areas of Uganda (Ndeezi, 2004:7). Learners with physical disability tend to lag behind in terms of technical knowledge and skills which could be

acquired in vocational education institutions. This has resulted into marginalization and dependence of persons with physical disabilities in the communities.

The ability of learners with physical disabilities to learn vocational skills therefore might as a result be limited by social economic and environmental barriers (Ndeezi, 2004:9) Mjelde and Daly (2006) look at vocation education as an interface between practical and theory involving both work related general knowledge and practical knowledge generated at work. The advantage of vocational education is due to its practical approaches in handling problems that affect human livelihood (Mjelde, 1995:132; see also, 2006a:79). Special vocational educators for persons with disabilities have the responsibility for managing the content delivery and assessment processes; as well as the responsibility to develop curriculum materials and take the lead in productive activities. To attain these skills and many more as demanded by the changes in the labour market, it calls for the 'special pedagogy' pointed out by Knowles (Amutabi, *et al*, 2005:9). Vocational pedagogy involves personal experience where by theory is learnt in close relationship to the practical skills that are to be acquired (Mjelde, 2006a:21). Persons with disabilities should therefore be treated on the basis of their individual needs and interests in order to enhance their VET. According to the *Uganda Educational Statistics* (2008) learners with physical disabilities have got different interests and demands, compared to the able bodied. These needs, interests and demands vary from one form of disability to another. Through effective teaching –learning processes, learners with physical disabilities can acquire basic knowledge and skills needed to become socially and economically independent and self reliant. Therefore learners with physical disabilities can be catered for by providing them with special facilities, making a flexible curriculum and formalize collaborative work in one's own field of competence so as to fit in the world of work.

Different views have been held by different scholars over the concept of learning. However, according to Mayes (2007:2), there are distinct traditions in educational theory that derive from different perspectives about the nature of learning itself. He cites three traditions as:

- The **associationist** perspective (learning as skilled activity)
- The **cognitive** perspective (learning as achieving understanding)
- The **situative** perspective (learning as social practice).

To Mayes, each of these theoretical frameworks can be characterized as providing a model of an ideal learner, choosing to focus its explanation on identifiable but particular aspects of learning behaviour. He believes that a learner is all of these at once. However, the lenses through which the learner is viewed at any particular point, and thus the model adopted along with its associated pedagogical approach, will be determined at least partly by the nature of the intended learning outcomes and the way in which they are to be assessed (Mayes, 2007:2). He contends that this description of the goals of a curriculum will convey underlying assumptions about the kind of behavior being brought into focus like skilled performance, deep understanding or effectiveness of practice. Arguably, right from the initial point of defining learning outcomes, an underlying model of the learner will emerge, a corresponding tradition of theory will be implied, and a pedagogical approach suggested. In his argument about the cognitive perspective to learning, Mayes cites Piaget's work as highly significant particularly in his assumption that conceptual development occurs through activity rather by absorption of information ((Mayes, 2007:2). In view of Piaget's approach, concepts should be treated as tools, to be understood through their use, rather than as self-contained entities to be delivered through instructions. As teachers, more so, those who believe in the philosophy of Piaget, we

ought to think about our own ways of teaching, one that should help the learner construct his/her own knowledge, understand concepts and be able to use them in their day-to-day life.

In line with Mayes (2007), Chappell (2004:3) argues that cognitivism is less concerned with promoting learners' overt performance by the manipulation of stimuli, rather it emphasizes the mental processing aspects of learning. Consequently, he further contends that the teaching process should involve the selection and use of pedagogical strategies that enable learners to develop cognitive strategies and abilities. The sorts of strategies, he suggests include framing, outlining, concept mapping and advance organizers. To him, these are seen as enabling learners to connect new information with existing knowledge in meaningful ways.

On the contrary, Gonczi (cited in Chappell, 2004), asserts that educational theorists such as Dewey, Piaget and Vigotsky have argued at length, against this conception of learning. They regard learning as the active construction of knowledge and skills by learners (2004:4). To him, this active construction involves learners individually and socially constructing meaning for themselves through experiences as they learn. This is seen from the situative perspective (Mayes, 2007). According to Chapell (2004:3), behavioural and cognitive psychology, hold significantly different assumptions about learning and therefore promote and legitimize different pedagogical strategies. He argues that behaviourism focuses on observable behavioural change and promotes the view that learning can be enhanced or inhibited by the manipulation of the environmental stimuli surrounding the learner. Consequently, he advocates for pedagogical strategies such as instructional cues, demonstration, practice, reinforcement, behavioural objectives and

positive feedback mechanisms to be planned and implemented by the teacher for learning to occur.

Advancing his argument about the situative perspective, like Chappell, (2004), Mayes, (2007) asserts that this perspective focuses on the conceptualization of all learning as 'situated' (p. 2). To him the learner will always be subjected to influences from the social and cultural setting in which the learning occurs, which will also shape the nature of the intended learning out comes. Knowledge is seen as situated in the practices of the group or communities and for that matter the focus should be shifted right away from analyses of components of subtasks and on to the patterns of successful practice (Mayes, 2007:3). His argument is in line with that of Lev Vygotsky (cited in Mjelde 2006a:191) (see also, Lave and Wenger, 1991:14), who contends that humans develop their thinking through language, thought, cognition and through cooperation in the community of practice. They view learning as a social practice. They highlight the importance of everyday activities and everyday context in providing meaning. To Mayes, to make learning significant, one must go beyond the classroom walls, beyond empty verbalism; real working knowledge grows through analysis of multi-faceted everyday life. The arguments given by Lev Vygotsky and Mayes are vital for teachers involved in the process of helping adults learn. Underlying both the situated learning and constructivist perspectives is the assumption that learning must be personally meaningful to the learner and that this has very little with the informational uniqueness of a learning environment. Activity, motivation and learning are all related to a need for a positive sense of identity (or positive self-esteem), shaped by social forces (Mayes, 2007:3); (Mjelde, 2006a:191).

The researcher therefore went where vocational education and training is being incorporated in special needs education. In this case, the study was carried out at

Providence Cheshire Home for learners with physical disabilities which sought to find out how the training of sewing skills was being handled where the main objective of learning is, to stitch fabric together with thread, sew by hand and machine and study the basic principles of hemming, adhering add-ons to fabrics and be able to read and duplicate patterns and layouts. Since 1990, Providence Cheshire Home has supported persons with disabilities with mobility appliances and has facilitated access to livelihood opportunities for persons with physical disabilities like sewing courses through support for skills development and access to employment in both formal and informal sectors. However the teaching and learning of sewing skills is by hands-on training, tools and materials like hand sewing machines, scissors, rulers, tape measures, screw drivers, pins, needles, pieces of cloths, sugar papers, pens, and lubricating oil are still being used. Despite of the global rapid technological changes of tools and materials the teaching and learning of sewing skills in the Home have maintained the use of basic tools and materials and other inappropriate methods are being used, which the researcher believes cannot equip learners with skills and competences required on the national development as indicated in the national educational goals, aims and objectives of the *Government White Paper of Uganda* (1992: 6-8 &116).

Today *Skilling Uganda* (2011-2020) puts emphasis on self sustaining skills and production. According to the *German Agency for Technical Cooperation* (*GTZ*, 2009), the poor quality, old-fashioned teaching and learning system used in training institutions is often out of touch with the needs of the world of work. As trainers, we need to improve the ways of teaching and learning processes and implement the policies that enhance the lives of PWDs if we are to maximize opportunities for learners with physical disabilities in the world of work.

1.1.1 Personal background

I am a professional educator and support service provider for learners with special educational needs during the National Examinations as well as a trainer of trainers in the field of Special Needs Education (SNE) at university level (usually participating in facilitation of distance education learners' programme). I am one of the twenty-one students in the third cohort for a Masters Programme in Vocational Pedagogy (MVP) at Kyambogo University sponsored by the Norwegian Agency for Development Cooperation (NORAD).

1.1.2 Motivation for the study

The researcher's interest to conduct research on the enhancement of training of sewing skills among persons with physical disabilities was influenced by her professional experiences as described below:

a) Working experience at Providence Cheshire Home, Nkokonjeru

The teaching and learning of sewing skills was by hands-on training, tools and materials like hand/mechanical sewing machines, scissors, rulers, tape measures, screw drivers, pins and needles and pieces of cloths, sugar papers, pens, and lubricating oil are used. Despite of the global rapid technological changes of tools and materials, the teaching and learning of sewing skills in the Home seem to have maintained the use of basic tools and materials. The researcher believes that one cannot equip learners with skills and competences required in the national goals, aims and objectives of the *Government White Paper of Uganda* (1992: 6-8 &116) there was need therefore, for further investigation in order to have an in-depth understanding of the phenomenon.

b) Training experiences at the NOMA Graduate School, Kyambogo University

From my past study experiences and expeditions held during the current MVP programme, the researcher took note of the minority group of persons and the way their needs were considered. The researcher noted that persons with disabilities' needs and considerations are not always recognized and take long to be considered; like choosing the right teaching methods, content, tools and materials and assigning appropriate activities for training in relation to the world of work. At times this is due to the long procurement stages gone through to be rendered assistance. Yet the *Business, Technical and Vocational Education and Training (BTVET) Act* (2008:6) clearly spells out equitable accessibility to disadvantaged groups such as women and people with disabilities (PWDs). All these compelled the researcher to get interest in the study to further investigate how vocational education and training of skills is conducted and incorporated in institutions for learners with physical disabilities in relation to the world of work, in this case the vocational training in sewing skills among persons with physical disabilities.

1.2 Statement of the problem

In spite of the fact that the Government of Uganda is committed to utilize TVET as an instrument of empowerment of its people through acquisition of appropriate portable skills at all levels of training (*MOES*, 2011),persons with disabilities trained in vocational institutions are still appear ill equipped even after completion of the course. In support, Dewey (1990) stresses those learners only come to work places after completion of training and do not experiment the work place while learning. The researcher therefore investigated the VET offered to persons with physical disabilities in Providence Cheshire Home Nkokonjeru, in order to get with the various factors that may be responsible for success or failure in enhancing VET.

1.3 Purpose of the study

The purpose of the study was to find out how VET equips PWDs with sewing skills so as to enhance their training for world of work.

1.4 Specific objectives of the study

The study was guided by the following objectives:

- To assess whether or not the methods used for training persons with physical disabilities in sewing skills are appropriate.
- To examine the ways by which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work.
- To find out how the tools and materials used in training persons with physical disabilities equip them with sewing skills to be productive in the world of work.
- To establish how the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work.

1.5 Research questions

The following research questions were derived from the specific objectives of the study:

- Are the methods used for learners with physical disabilities in sewing skills appropriate?
- How does the VET curriculum equip learners with physical disabilities with sewing skills for the world of work?
- How do the tools and materials used in training learners with physical disabilities in sewing skills equip them to be productive in the world of work?
- How do work related activities involved in training learners with physical disabilities in the VET institutions to equip them fit in the world of work?

1.6 Scope of the study

The content of the study, geographical location of the area under study and the time in which the study was carried out are explained in this section.

1.6.1 Content scope

The study was limited to the variables addressed in the objectives of the study mentioned above. The researcher looked at the methods, content, tools and materials, then the work related activities focusing attention to the character of tasks, tools, materials in a wide perspective, time and how it is used, work/learning forms, work/learning context. Communication in the frame of work/learning, work related help in a wide perspective, work related results, qualities related to the "product", qualities related to the work processes, quantities of " products", delivery security in terms of time, consequences of efforts; psychological, social, economic, working/learning conditions in terms of the rhythm of the work day, week, periods, work conditions in terms of regulations in order to prevent damages of physical and/ or mental character (Nilsson, 2008).

Geographical scope

Geographically, the scope of this study was limited to Providence Cheshire Home, Nkokonjeru in Mukono District, where there is training for livelihood opportunities for persons with physical disabilities for world of work.

1.6.3 Time scope

The study time investigated span from 2007 to March 2013. This was convenient to the researcher, hence putting into consideration the graduates in the world of work

1.7 Justification

The rationale for carrying out the study was due to the expected outcomes of the initiative: the sewing /tailoring trade is opted for both females and males; this is evident in

the world of work where either a man or woman is a tailor by profession. In adapting to global quality of life, we can see a move towards inclusion of persons with disabilities in all activities as stipulated in the *Uganda's constitution* (1995) Thus: need to train lifelong skills to those who have been wrongfully misperceived as misfit in the mainstream of the society.

As per the statistics from *Uganda National Housing and Population Census Report* (2009), the disability rate in Uganda was 4%, compared to 3.3% internationally. It was because of these trends in disability that the struggle to meet the special needs of learners with physical disabilities in educational institutions gained momentum. This was supported by the national and international disability movements that were also promoting special needs education and thus the struggles have to continue.

1.8 Significance of the study

The accomplishment of the study was expected to be beneficial to the academicians, policy makers and any other user of the document in the following ways:

- The findings would suggest ways of optimizing the quality of the vocational education and training in sewing skills among physically disabled people in vocational institutions and thus increase the number of PWDs with competence required in the world of work.
- The new knowledge could be useful as a source of reference for academicians, administrators and instructors in vocational institutions interested in vocational pedagogy.
- The recommendations of the study would also act as a guide to policy makers, administrators and instructors in vocational institutions in developing strategies to

cater for the interests and demands of learners with physical disabilities in vocational institutions in Uganda.

- The study would enable the researcher to acquire analytical and interpretation research skills.
- The study also would aid the researcher in training sewing skills to persons with disabilities using the pedagogical methods as explained in the constructivist theory and hence bring people excluded from society into a creative community.

1.9 Study Limitations

Like any other study there were limitations to this inquiry, some respondents had a busy schedules which forced the researcher to re-schedule appointments from time to time.

Following up respondents to their places of work and residence at their various locations was tedious for the researcher.

1.10 Definition of operational concepts / terms

Enhancing: Refers to improving the quality, value or extent of training in this context

Physical Disability: In this context it is either the absence, non-function, or mal-function of a bone, a muscle, nerve, or any part of the body, resulting into the person having restricted movement, agility that is regarded ordinarily not normal or needs the support of assistive devices to move.

Sewing: Mechanically using a driven needle for stitching clothes

Skills: Ability to do something well with expertise like sewing clothes

Training: Teaching a person a particular sewing skill through regular practice or instruction

1.11 Outline of the study

The study was arranged in five chapters. Chapter one was an introductory chapter, which incorporated the study background, statement of the problem, purpose and objectives to the study. Chapter two had literature review from different scholars. Chapter three addresses the research methods employed to gather information to answer the set research questions in relation to the objectives of the study. Chapter four includes the interpretation and presentation of the findings. Chapter five discusses the findings, conclusions and recommendations based on the findings.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter examines other people's views into the debates about learning and their arguments towards improving the process of learning. The chapter also reviews related literature from documents containing information that was related to the problem under investigation. This was done in order to determine what has already been done by other researchers, professionals about vocational education and training among persons with physical disabilities and competence in the world of work then add the missing links. The relevant literature was got from both primary and secondary sources like bulletins, journals, newsletters, reports, textbooks and lecture handouts.

This chapter was organized under the following headings;

- Theories underpinning learning
- To assess whether or not the methods used for training persons with physical disabilities in sewing skills are appropriate.
- To examine the ways by which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work.
- To find out how the tools and materials used in training persons with physical disabilities equip them with sewing skills to be productive in the world of work.
- To establish how the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work.

2.1 Theories underpinning learning

The teaching/learning strategies are greatly influenced by the individual's orientation in as far as theories of learning are concerned. According to the constructivists'

theory, learning involves the active construction of meaning by learners, which is context dependent, socially mediated and situated in the 'real-world' of the learner (Chapell, 2004:4). For that matter, many instructors and trainers use pedagogical strategies based on constructivist views of learning. Strategies such as small group work, discussion, debate, practical problem solving, the presentation of alternative perspectives, sharing of information, reflective practice, cognitive apprenticeships, modeling, mentoring and coaching may be used. He argues that much of adult learning, experiential learning, problem and project-based approaches base teaching and learning practices on constructivist theory. To substantiate his argument Chapell further explains that:

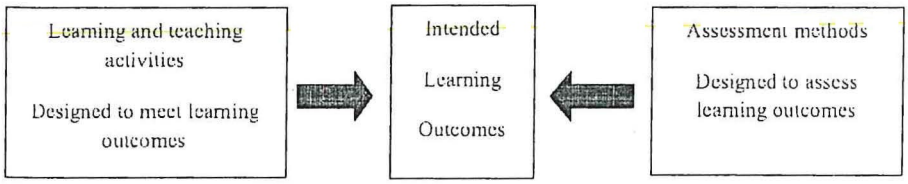
> Indeed the latest interest in situated learning, work-based learning and 'communities of practice' suggest that constructivism is now a major contributor to understanding pedagogical practice. Indeed it seems that constructivist theory has become the main source of understanding contemporary teaching and learning practices

Vocational institutions ought to borrow what the constructivist theory elicits. Instructors should train skills in groups so as to enhance sharing of information and use individualized Educational Programmes for slow learners to address practical problem solving so as learning is meaningful to the individual. According to Tyler, (cited in Biggs, 2001:2), "learning takes place through the active behavior of the student- it is what he does that he learns, not what the teacher does". In support of Tyler, Shuell (cited in Biggs, 2001:2) elaborated further that:

> ....if students are to learn desired outcomes in a reasonably effective manner, and then the teacher's fundamental task is to get students to engage in learning activities that are likely to result in their achieving those outcomes. It is helpful to remember that what the student does is actually more important in determining what is learned than what the teacher does

Figure 1.1, illustrates the underlying principles of constructive alignment, adapted from Biggs (cited in Bookallil, *et al.* 2009). To them 'constructive' component suggests that

students construct meaning through relevant and authentic learning activities. It implies that it is the responsibility of the teacher to act as the catalyst that facilitates the learning of the student through creating learning activities and assessment that are aligned with the learning outcomes, in such a way that students can construct meaning in a given learning event (Biggs; Shuell, cited in Bookallil, *et al.* 2009). The 'alignment' component refers to what the educator does (Bookallil, *et al.* 2009:821). That is, the educator creates a learning environment that includes learning activities and assessment that facilitate the student achieving the desired learning outcomes.



Source: Bookallil, *et al.* (2009:821)

Figure 1.1: Aligning learning outcomes, activities and assessment

According to Galbraith 2002/2003, (2004:3), "the mode and complexity of teaching and learning process are confined in the individuality and habit of those who take on the role of teacher and learner". He argues that the purpose of teaching should be to facilitate personal growth and development that impact the professional, social, and political aspects of learners. His argument is somewhat similar to that advanced by Mayes' (2007) on constructive (cognitive) and situative perspectives of learning. Like Mjelde (2002, 2006), learning must be meaningful to the individual involved and takes place through activity and cooperation.

2.2 Assess whether or not the methods used for training persons with physical disabilities in sewing skills are appropriate.

2.2.1 Teaching and learning strategies

Heimlich and Norland (cited in Galbraith, 2004:4) contend that "teaching is a skill and a gift, a talent and a technique". To them good teaching should be a balance of understanding oneself as a teacher and knowing how to develop learning encounters that are meaningful and useful in the promotion of personal and professional growth. They argue that it may be difficult to develop the above balance given the fact that most instructors in the multitude of institutions are experts in the content they teach, but usually have little preparation in the instructional process of helping students learn. In view of Mayes' case, there is need to have adequate preparation involving the learners in construction of their learning encounters if they must find meaning (Biggs, 2003). Kizito (1993) reminds teachers that the main responsibility of a teacher is to take existing curriculum framework and match it with the needs of the individual students while taking into consideration any special needs that may exist. From that reminder, it is the institution's responsibility to implement the activities and create possible ways of providing appropriate methods of teaching in BTVET institutions and work places. In the same line Aggarwal (1999) observes, one of the chief objectives of education is the development of desirable feelings in the student. It is therefore obvious that the instructors are required to develop several feelings in the students including those with disabilities like, feelings towards studies, self, colleagues and certain ideals that will not only make them capable citizens but help them to develop positive feelings, show initiatives, assist those in need and lives which offer good examples to others. This also confirms the need

for PWDs to acquire knowledge and skills in BTVET so that they may be able to cater for their own needs and other peoples' needs in society.

The most common teaching method used by the teaching staff at the tertiary level is the lecture method, according to Farrah, (2004:227) is a legitimate instructional method in which the teacher talks and the learner learn from the instructors' discourse. Although good in some situations, lecture may not be the best approach to teach motor technical skills or modify attitudes, besides, as a method, it is less interactive. It takes the form of what Freire (1972:53) referred to as the "banking concept", taking the teacher as a depositor, and the student as the bank, storing narrated knowledge of the depositor- until examination time when the knowledge must be withdrawn from the account. Lecturers ought to be partners with students in the exploration of critical thinking and critical attitudes.

Lev Vygotsky (cited in Mjelde, 2006a) criticizes traditional teaching from the point of view of his understanding of the great importance of interaction and cooperation (to increase the speed and the scope of cognition in comparison to non- interactive activity) in the process of learning (Mjelde, 2006b:126). He argues that the learner's on-going performance in interaction with the teacher and fellow students is a far more precise index of learning than intelligence tests based upon a goal composed of pre-digested knowledge acquired by the individual.

According to Mjelde (2006a:78-79),

> In more recent theories of learning, major weight has been placed upon the basic nature of mutual or reciprocal effects in the learning process, one that occurs in the student's head while he/she is listening to a teacher or reading a book, but rather as something that is fundamentally mutual.

To her, learning is an internalization of a schema which integrates cognition with perception and activity. She further contends that schema are made meaningful by means

of one doing something together with an 'expert' in such a manner that the learner gradually masters even more difficult parts of the tasks at hand. Instructors in vocational institutions should indeed try to illustrate what is to be done then later group learners to perform the same activities as a group and eventually the activities are re-practiced individually for mastery of the skills. Group/teamwork is one of the basic principles in vocational pedagogy. In support of teamwork, Wlodkowski (2004:147) asserts that adults feel connected in a group when they share a common purpose and a sense of mutual care exists. He argues that people in the group care about each other as they pursue their joint goal. In a group, people feel included and are freer to risk mistakes where true learning occurs (Mjelde, 2006a). Therefore the norms we set as instructors and the strategies we use as we teach largely determine the quality of social exchange among the learners. These should be supportive of equity, collaboration, and expression of each learner's perspectives in group tasks.

In his argument about the human and task aspects of work, Nilsson (2008b:3) explains the need to feel loved and involved if work/learning must take place. Everyone must have a feeling of being loved, accepted and needed for productive participation in a task. This is possible if we give group tasks to encourage learners' mutual cooperation and respect of one another. Similarly, instructors in vocational institutions should encourage group working methods for acquisition of the sewing skills though the student ratio is high.

2.2.2 Field work/placement

Field placements/field work or on-job education, called apprenticeships in other countries like Norway provides one of the practical approaches for equipping the learners with relevant practical skills. According to Egau, (2002:20) industrial training forms an

integral part of all the courses in Vocation Education and Training (VET). Unlike Norway (Bergli *et al.* 1997), where there is a clearly enacted policy on apprenticeships, the policy in Norway clearly spells out that the learner spends two years in school and another two in working life as an apprentice. This was after "*the reform 94*" (Mjelde, 2006a:115). For Uganda, there is no clear policy on apprenticeship yet. Each institution has its own procedure on the same. The aspect of industrial (internship/enterprise attachment) training in Uganda which is meant to help produce a well grounded graduate is more often not well organized or planned, partially on account of finances to facilitate students and lecturers to monitor and supervise the students while on placement. Consequently the trainees are more likely to come out of the training institutions when they are not well prepared for the world of work.

2.2.3 Assessment and evaluation of the learning process

According to Shepherd and Godwin (2004:2), the cornerstone of developing successful educational, training, and certification materials is the effective use of assessments. Shepherd and Godwin further assert that assessment is any systematic method of obtaining evidence from posing questions to draw inferences about the knowledge, skills, attitudes, and other characteristics of people for a specific purpose. Like Shepherd and Godwin, Biggs (2004:5), contend that assessment is almost certainly the most important single component in the education system. He contends that:

> Get assessment wrong and you get everything wrong. We therefore need to be clear about why we assess, what we assess, how we assess, and who is involved in the assessing.

While elaborating on assessment, Biggs further asserts that the mode of assessment brings out the most likely kind of learning that is being assessed. For example, using a practicum

as a mode of assessment implies that the kind of learning that is being assessed is application/use of practical skills.

In conjunction with Biggs' argument on the importance of assessment, Shepherd and Godwin (2004:2), argues that it is critical to understand how people learn, what they have learned, and whether the knowledge is useful for their particular job. That is why he believes the cornerstone of developing successful educational, training, and certification materials is the effective use of assessments. He further contends that "while assessments used to consist of reams of paper upon which students filled in tiny boxes, now companies and educational institutions have a real opportunity to use technology not only to make assessments more widely available but also to make the process far more effective". Institutions use assessments to guide people to powerful learning experiences; reduce learning curves; extend the forgetting curve; confirm skills, knowledge and attitudes; and motivate people by giving them a real sense of achievement (Shepherd & Godwin, 2004: 2).

According to Yates (2007) for vocational purposes, in the current Australian Qualification Framework, knowledge is observable competence. Students are assessed as 'competent' or 'not yet competent' - no grading is required (Yates, 2007: 8-9). He further explains that for the certificate that counts for university entry, it is assumed that knowledge is something displayed in writing and language, and as pointing to underlying hierarchy of intelligence, and assessed via examinations that are scored. From my personal experience, the views held by Yates are common scenarios in vocational institutions where assessment is mainly examination oriented testing the intelligences of the learner, and little is tested of their ability to work effectively.

2.3 Examine the ways by which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work.

2.3.1 Curriculum as a steering "tool"

Curriculum for learners with physical disabilities should be designed to meet the unique needs of the learners (Sabou, 1999). Such a curriculum should emphasize the following areas; self-help skills, social adjustment in the Home and neighborhood as well as economic usefulness. Providence Cheshire Home supports disabled people with mobility appliances, literacy trainings to equip persons with physical disabilities with basic knowledge and skills to exploit the environment for self and national development as indicated in the national educational goals, aims and objectives of the *Government White Paper of Uganda* (1992: 6-8 & 116).The home also facilitates their access to livelihoods opportunities like in baking, sewing/tailoring, and handicraft through support for skills development and access to employment in both formal and informal sectors. This can be attained if they are given skills to make a living; such skills ought to be included in a curriculum which is used in the training institutions. However, this still remains a big challenge for development agencies and such a vocation education curriculum soon becomes outdated when steps are not taken to review it regularly to meet the needs of learners(Finch & Crunkilton, 1999).This could involve making a curriculum that meets the needs of learners with physical disabilities for the world of work.

In line with vocational pedagogy, Dewey, (1916) cited in Mjelde, (2006) argued that theory that stands opposed to practice is fruitless. The idea became a cherished one and points to a curriculum that is all round, placing more emphasis on the practical skills. In general sense, education is guided learning to help a child gain skills and understanding for meeting lives needs (Werner, 1996:497). As a child grows up in a global world, many additional skills and knowledge are needed. The knowledge and skills can be achieved

under the mentorship and guidance of a caring teacher. Instructors therefore, have the crucial role of guiding these learners with physical disabilities to ensure they learn satisfactorily.

In support of the views Werner, 1996:497 explains that when a teacher treats a learner with special needs with respect, and gives him/her encouragement, the child may benefit greatly from school both educationally and socially. Polloway and Patton (1992:80) recommend for instruction of learners with physical disabilities in functional academics, daily living skills, social and vocational skills. They also suggested that instructors do not have to follow a particular method but use a variety of teacher directed, child-directed and peer-mediated approaches. Teacher- directed method involves applying skills such as task analysis and modeling. Traditional teaching is of great importance in interaction and cooperation in the learning process (Vygotsky cited in Mjelde (2006:94). From the researchers point of view the behavior to be learned can be actively reinforced through demonstration under the guidance of the instructor in cooperation with fellow students in order for them to realize full benefits from vocational education.

However during our research expedition most institutions visited had an outdated curriculum that cannot meet the requirement of the world of work. This is in line with Liang, (2004: 40), who asserts that the content taught in VET institutions in Uganda, is a version of the Oxford/London syllabuses of the 1950s. Accordingly curriculum is supposed to be revised after every four years (Kikomeko & Chebet, 2009). But little has been done by the National Curriculum and Development centre (NCDC) despite the community outcry. The *UNESCO's International Centre for Technical and Vocational Education Training* (*UNEVOC* 1993:3) cited in Ogwang (2009:12) further depicts that, "due to lack of resources, experience and traditions, developing countries simply tend to

copy existing curriculum materials from industrialized nations without proper adoption to the local situations and needs. As a consequence of such curriculum, the content is not usually rooted in people's culture. In my opinion, this is typical of the nature of Uganda's curriculum of the VET institutions. In Uganda the predominantly outdated curricula and training standards in use do not sufficiently reflect the skill requirements in employment market.

2.3.2 Future World of Work

The future world of work requires the use of modern skills in the implementation of tasks geared towards quality production of work. Training institutions need to inculcate these ideas through the teaching and learning processes. To affirm this, Nilsson (2011) points out that both new knowledge and demands about vocational learning and possibilities related to new technology results into new tools, materials and tasks demanded by the market in terms of products and services. Training courses that meet the current market needs considers available resources and tools in relation to the world of work. With regard to Nilsson (2011), Providence Cheshire Home where the training of sewing skills is being handled and whose main objective of learning is, to stitch fabric together with thread, sew by hand and machine and study the basic principles of hemming, adhering add-ons to fabrics. Hence enrollees are able to read and duplicate patterns and layouts.

Walukaga (2011) points out that education that matches the technological level within a country prevents unemployment based on poor choices and wrong combinations at lower levels of education. Walukaga further explains that in the 1960s, people were booked for job placement before completing training. The education systems need to think and readjust the programme to make it relevant and meaningful to the learners in this

country. Therefore the competence in using tools to impart practical skills is needed in vocational institutions to equip trainees with employable knowledge. Nuwagaba (2012: 29) suggests that "countries that have solved unemployment problems rapidly have built on an education that teaches Nationals practical skills that is missing in Uganda's education." Manday adds "Uganda's education needs to be restructured to make it relevant to modern demands" (2012: 29). Vocational institution need to build on an education that trains practical skills therefore the curriculum ought to be re-structured so as to meet the learners' needs and demands.

2.4 How the tools and materials used in training persons with physical disabilities equip them with sewing skills to be productive in the world of work.

2.4.1 Tools and materials

Literally, tools are devices typically hand held, used to carry out a particular function for example sewing machine, scissors, pins while Materials are items needed for an activity for example in this case; pieces of paper, clothes or fabrics, pieces of chalk among others. Vocational Education can become something important in the framework of school systems and meet the requirements of the labour market if the availability of different varied tools and materials which are in good condition are in place. This is in agreement with Nilsson (2011) who asserts that, understanding which working tools to be used is a very important part of planning function in the training institutions and workplaces meaning that the working tools and materials should be in good working condition. He further stated that how to master the tools in order to achieve wanted work results is very important and there is need to pay attention to that. This is evident in many vocational institutions where some learners take long to learn a skill because the tools and materials are few, out dated and can easily cause damage to the users. Therefore the tools

must be in a good condition such that they do not cause damage to humans and work materials.

Kauffman (1999) pointed out that teachers were unprepared to teach due to poorly supported infrastructure facilities including instructional materials. Similarly, (Atim & Okot, 1998) report the problem of provision of tools and materials as one of the challenges in vocational institutions. From the researcher's point of view, text books, human resources like more skillful trained instructors are lacking in most training institutions. In support of this view, Mbiti (1981) asserts that the contributing factors to the poor quality of education in many developing countries is lack of adequate tools and materials and proper physical facilities which are conducive for effective learning. However, what is being practiced in institutions leaves a lot to be desired because where there is need to provide tools and materials to the physically disabled e.g. sewing machines in this case, hand machines and readily available materials are lacking. This has caused a lot of negative perception on PWDs to enroll for VET in most institutions. Many institutions lack tools and materials and where they are present, they are old and not accessible respectively therefore this has continued to stigmatize PWDs.

2.4.2. Assistive Technology/devices

Assistive technology/device is defined as; any item, piece of equipment, or product system, whether acquired commercially of the self, modified, or customized, that is used to increase, maintain or improve functional capabilities of individuals with disabilities. While assistive technology service was defined as: any service that directly assists an individual with a disability in selection, acquisition or use of an assistive technology Service (http: // www.edudeafie and Assistive technologies.html). There is a clear and growing need for assistive devices to help address the special educational needs of

students as an ever increasing number of learners with special needs seek to realize their full potential through education. Therefore learners in Providence Cheshire Home with physical disabilities, require assistive technologies/devices like electric machines, wheel chairs *et al*. In many cases, assistive devices are essential to the independence of learners and their ability to cope with learning materials or travel to and from training venues. In the *Thabo Mbeki Development Trust (TMDT) Annual Report* (2007/2008: 14), it was stated that a learner without arms who wrote with her feet faced unique problems. The Report also pointed out that, a specially designed folding table was made for her and this did much to ease the situation, hence improving her learning condition. In the same *TDMT Annual Report* (2007/2008: 14) a female learner with physical disability had difficulty in mobility as her wheel chair was heavy. The TMDT also provided her with a light-weight wheelchair and cushion that assisted her with improving her learning process, life and independence. These basic findings help to drive the point Home as to how available assistive devices like wheel chairs, modified tables *et al* enhance the learning process of students with physical disabilities in vocational institutions.

Technology manipulates the teaching and learning in a number of ways. Schacter, cited in Semih and Mustafa (2011:1), maintains that, technology accelerates, enriches, and deepens basic skills, motivates and engages students learning, helps relate academics to the practices of today's workforce, strengthens teaching, increases the economic viability of tomorrow's workers, and connects schools to the real world. For learners to be motivated in their skills development, the technology they use in training institutions should help them to relate their learning activities to the world of work. This relationship is possible when the technology like hand sewing machines and electrical machines in training institutions is the same as that in the world of work. Similarly, relating learning

activities to the world of work helps the learners to acquire skills relevant and the world of work. Integrating technology which is in the world of work into training programmes in training institutions helps learners to acquire relevant skills, applicable in the world of work where technology is ever changing. Donahoo and Whitney, cited in Semih and Mustafa (2011: 1), put it that schools cannot truly prepare students to function within society if the they fail to cover the equipment and skills which are actually used in the real world, and that they cannot hope to improve the overall value of their programs without sufficiently integrating new technology in their programmes. If technology is not well integrated in the training programmes, learners will continuously be trained in fields and for jobs that do not exist in the world of work. In accordance, Miller, cited in Barabasch, in Mjelde and Daly (2006:147) asserts that in manual labour trades, thousands of apprentices are being trained for jobs that have already disappeared. This therefore means that learners will get the training but will not be absorbed in the labour market because the skills they will have acquired will not be relevant and applicable in the world of work. Technology used in training institutions should be the same as that in the world of work to help learners acquire skills relevant to the world of work, because it is that technology that facilitates both the training and skills acquisition cited in Bataineh and Brooks (2003:9). Zenger anticipated that technology in the twenty-first century would be the force in determining how and what a teacher will choose for instruction in the teaching and learning situations. This means that technology in training institutions plays an important role in determining how and what the learners should be trained.

In line, the law in the United Kingdom says that state schools must do their best to see that special help is provided for all children with special needs. In this case, the Local Education Authority is expected to make assessment of a child's educational needs like

learner's needs detailing the difficulties and the most appropriate special help required, based on specialist advice and records of each person with disability have to be kept for purposes of future reference and for prescribing the kind of help needed (*BBC*, 2005). The Individuals with Disabilities Act (IDEA) was passed by the United States Congress twenty years ago in 1988 and was updated in August, 1990. This law requires free appropriate public education for children identified with disabilities. In case of Uganda, Article 35 of the *Constitution of Uganda* (1995: 52) states that Parliament shall enact laws appropriate for the protection of persons with disabilities. Today, the assessment of learners with physical disabilities and other forms of disabilities is done by the District rehabilitation officer of the respective Districts in Uganda. The Educational Assessment Resource Services (EARS) which were put in place to conduct the assessments of all persons with disabilities are no longer carrying out the assessments in various districts in Uganda.

2.5 How the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work.

The relationship between school and work is a central focus vocational training should be linked to the work place activities and must be regulated to enhance learners' vocational practices. This from the researchers point of view would mean, learning must draw a lot from what the labour market demands so as to produce skilled and competent learners. In support, (Dewey, 1990) promoted workshop learning and cooperating with the work places. Dewey stresses interdisciplinary approaches especially through experimentation while learners as well experiment the work place while learning but not only come to work place after completion of training. The researcher solely agrees with this view because by means of the experiments the learners would get more familiar with the environment. However at Providence Cheshire Home learners minimally experience

the work place during their training and then go to work with little experience in the world of work. Okinyal (2006) puts it that vocational education is practical oriented and its success is dependent on the availability of teaching materials, tools, machines and equipment. So the more familiar the learners are with tools, the more easily they can use them without difficulties in the place of work. He also argues that the learners need to be exposed to different types of tools and materials because if these are grossly lacking in the institutions learners will not have much competencies directly required in the labour market. In agreement with Okinyal, learners familiarity with tools and materials is very important in vocational training and skills acquisition and the success of vocational training requires the understanding and proper use of tools and materials by both the learners and the instructors. The success of this is dependent on the close linkage between the training institutions and the world of work.

2.5.1 Assessment and development of assessment tools.

Assessment as been defined as the process of identifying needs so that plans for intervention services are designed to help individual (Hooper, 1999).

From my experience, there is need to use multiple methods of assessment. To get a true picture, it is important not to rely on one method. It is important to get a complete picture from many sources and point of view. Specifically, assessment techniques are outlined here under and it is important to use a combination of some of this direct observation, questionnaires, consultation with persons in key positions of relevant literature, interviews, focus groups, tests, records, report studies and work samples. For example here in the NOMA programme continuous assessment was carried out for each student through tutorials and final assessment for each module was done using: the mini project reports that we presented and at times students were asked to defend the findings of the

expeditions carried out in plenary sessions. Then, also we were assessed using examinations for the course. Both continuous assessment and examinations count for 50% in each respectively. The most common categories of assessment used in vocational institutions are formative and summative assessment: that have a primary objective of providing practice for search and retrieval from memory for a student and to provide prescriptive feedback (item, topic and/or assessment level) and usually summative giving a definitive grade and/or make a judgment about the participant's achievement. If the judgment verifies that the participant has met an established standard indicative of special expertise, the judgment may confer "certification. Therefore this clarifies the kind of assessments carried out at Providence Cheshire Home.

According to Hooper (1999), assessment clarifies what the problem is and why it exists, before creating solutions. Assessment is the key to ensuring that the required range and capacity of services is available and accessible to the target group in a local area. A good assessment process should identify the needs of a target group in a particular area; help to priotise those needs to ensure better planning of local services more effective allocation of resources, develop an implementation plan that outlines how identified needs will be addressed. Therefore, the outcome of an assessment should ensure that the target groups assessed needs are met more effectively. The evidence is that most PWDs will have a range of needs and that a wide range of agencies and service providers may have a role in responding to those needs. This means that assessment in the disability field is a complex task, requiring time and effort and a wide range of skills.

2.6 Summary of Literature Review

Effective vocational training of learners with physical disabilities in relation to the world of work requires training institutions to provide relevant tools, materials and

facilities; similarly assistive devices and technology enhance learning and training of sewing skills. To improve on the level of preparedness, the learners should expect to meet the competence needed in accomplishing tasks. The method of training should allow trainees to interact with tools through practical vocational experience that helps them to gain competence and mastery. Collaborative learning through group projects aids the teaching/learning process where the use of tools minimizes teacher participation during training. Therefore Providence Cheshire Home ought to put in practice the views and ideas from the educationalists in order to enhance training of sewing skills among persons with physical disabilities for development and employable skills.

The next chapter discussed the methodology that was employed during the study.

CHAPTER THREE: METHODOLOGY

3.0 Introduction

This chapter presented the methodology that was used during the study. It discusses and describes the research design, sample size and selection, sampling techniques, the data collection methods, tools/instruments, data collection procedures, processing and analysis of data, data quality management as well as steps that were taken to ensure validity and reliability during the study.

3.1 Research Design

The qualitative approach was employed to conduct an intensive investigation on the aspects of training persons with physical disabilities in sewing skills for world of work following descriptive research design. This is supported by Kothari (2004:37) who stated that studies concerned individuals, group or situation are best studied through descriptive research design. The qualitative approach is considered more appropriate in exploring, observing and describing the aspects of vocational skills training than quantitative methods (Le Compte & Preissle, 1993 as cited by Creswell 2010). However the quantitative approach was used minimally to list the number of responses and later be described in words. The quantitative approach enabled the researcher to provide a numerical dimension to analysis while addressing the phenomena.

3.2 Study area

The study was carried out at Providence Cheshire Home Nkokonjeru, Mukono District training persons with physical disabilities in livelihood opportunity programmes like baking, agriculture and sewing/tailoring thus identified for the purpose of this study.

3.3 Study Population

There are five Cheshire Homes in Uganda; however each Home carries out different work and Nkokonjeru providence Cheshire Home specifically trains persons with physical disabilities in livelihood opportunity programmes. Therefore, the population comprised of 15 instructors who teach at the Cheshire Home, 80 students, 25 graduates. In research, population means the "totality of all subjects under investigation". (Kakooza, 2002:11)

3.4 Sample size

The sample size included both males and females for gender balance. The MVP programme emphasizes gender balance. (Programme book for MVP degree, 2009:3). A sample of 50 was used for this study from Providence Cheshire Home in Nkokonjeru, these included: Ten instructors who were both men and women working at the Home had information on the nature of teaching and could easily tell constraints they met during the teaching. Thirty continuing students who were both male and female were deemed to be well equipped with pertinent information regarding the training and how it relates to the demands of the workplaces. Ten graduates who were female and male prime research participants were identified. In the study the researcher considered both sexes in order to get a balanced view of the nature of training and their experiences in the workplace. The reason for this particular focus was that in addition to the fact that they had completed their training; they had also been in the field (workplace), experienced its reality and therefore had a better picture of what they went through.

Table 1: Study population, sample size and sampling

Category of respondents	Target population	Sample size	Gender		Sampling Technique	Data Collection methods
			Male	Female		
Instructors	15	10	4	6	Purposive Sampling	In-depth interviews and focus group discussion.
Continuing students	80	30	10	20	Stratified-cluster Sampling	In-depth interviews and focus group discussion.
Graduates in the world of work	25	10	4	6	Snowball Sampling	In-depth interviews and focus group discussion.
Total	**120**	**50**	**18**	**32**		

Source: Self generated data

3.5 Sampling strategy

The population of students, instructors and graduates involved in the study had experience and knowledge of sewing skills, and as such, different sampling strategies were used. In order to get the needed sample size of students, a stratified- cluster sampling strategy was used. The strategy involved first to get lists of students in second and third years that opted for Tailoring /Sewing as an elective in the Home. Secondly, lists of students separated into gender categories and arranged in alphabetical order were generated from the already acquired lists. The third step was to write names of students in each category on small papers, fold them, put them into a container, shook the container to mix the content, picked that number of the sample size needed, unfolded and highlighted those names on the original list of gender category.

With regard to the sample size of instructors, there was no sampling strategy due to the experience the instructors have since they trained the learners in vocational skills in sewing. Snow ball strategy, where one person leads to another, was used to select

graduates who opted for sewing and are in the world of work. The snow ball technique was used because it was difficult to have the sample of graduates all at once in a group due to work schedules and distance from each other. The researcher identified few graduates under the study who identified other graduates. Katebire (2007:42-43) asserts that snowball sampling allows the researcher to identify a few respondents to participate in the study, who then help to identify yet other potential respondents.

3.6 Data collection methods

The data collection methods, explained in this section involved the instruments which were used to collect data needed for the study in relation to the research objectives.

3.6.1 In-depth interviews

Interviews helped in gathering information about the methods used for training persons with physical disabilities in sewing skills, ways the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work and how the tools and materials used in training persons with physical disabilities equip students with sewing skills to be productive in the world of work. Establish how the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work. The interview guide containing open ended questions was used to answer the questions of the four objectives of the study. Interviews were conducted because they are more appropriate in providing in-depth data, allows clarity in questioning and fairly flexible (Amin, 2005).

3.6.2 Focus group discussion

Focus group discussions were conducted with instructors, continuing students and graduates of Providence Cheshire Home of the disabled in the world of work to get information about the methods used and how the VET curriculum equips learners with

physical disabilities with sewing skills relevant for the world of work. And find how the tools and materials used in training learners with physical disabilities equip them with sewing skills to be productive in the world of work. Thus, establish how the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work. These approaches help to probe and ask additional questions as the interviews progress to precisely get the information needed as supported by Amin (1998: 178)

3.6.3 Documentary analysis

To assess the methods, examine the VET curriculum, tools and materials used for training learners with physical disabilities in sewing skills are appropriate. The researcher reviewed documents in Providence Cheshire Home related to the issue under investigation. Sources of the documents included course outline, timetable, and minutes of the meetings, course content and informants were analyzed together with the works and the exhibitions available for continuing students. The method was used because it enabled the researcher access data at her convenient time. As well as obtain data that are thoughtful in that, the informants have given attention in obtaining data that would enable the researcher interact in the language of the respondent (Oso & Onen, 2008).

3.7 Instruments

3.7.1 Research objective one.

Research objective one where information required was to assess whether or not the methods used for training persons with physical disabilities in sewing skills are appropriate, the researcher used an in-depth interview guide appendix II, III and IV for carrying out one to one interviews with students, instructors and graduates in the world of

work. Focus group discussion guide V for students was used to assess the methods used for training sewing skills were appropriate. A camera was used as an instrument to enhance observations and recording of the interviews and discussions. A record form was used to verify the tasks, books and websites used by instructors for training learners in sewing skills.

3.7.2 Research objective two.

Research objective two sought to examine the ways by which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work. In order to get the needed information from respondents, several instruments were used. An in-depth interview guide II, III and IV for carrying out one to one interviews with students, instructors and graduates in the world of work and focus group discussion guide V for students was used to examine how the VET curriculum equips students with sewing skills relevant for the world of work. A camera was used as an instrument to enhance observations and recording of the interviews and discussions. A record form was used to verify the tasks, books and websites used by instructors for training learners in sewing skills.

3.7.3 Research objective three.

Research objective three sought to find out how the tools and materials used in training persons with physical disabilities equip learners with sewing skills to be productive in the world of work. An in-depth interview guide II, III and IV for carrying out one to one interviews with students, instructors and graduates in the world of work and focus group discussion guide V for students was used. A camera was used as an instrument to enhance observations and recording of the interviews and discussions. A

record form was used to verify the tools and materials used by instructors for training learners with sewing skills in regard to quality, storage and operation.

3.7.4 Research objective four.

Research objective four sought to establish how the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work. An in-depth interview guide II, III and IV for carrying out one to one interviews with students, instructors and graduates in the world of work and focus group discussion guide V for students was used to find out the work related activities they do in the VET institutions to fit in the world of work. A camera was used as an instrument to enhance observations and recording of the interviews and discussions.

3.8 Procedure of Data Collection

At this point, the researcher obtained a letter of introduction from Kyambogo University, which was presented to vocational institutions. With the help of an introductory letter, formal appointments were fixed with the respondents and permission was secured to access data collection sites. Consent of the respondents was obtained hence rapport among respondents was created during the interviews and focus group discussions coupled with documenting of relevant data. Participants were informed in advance of the overall purpose, Kvale (1996) notes that informed consent involves informing respondents about the purpose of the research. To this effect, the researcher maintained the consent of the respondents till the exercise was concluded.

3.9 Validity and Reliability of instruments

Data quality management which is validity and reliability was done to ensure that the instruments were valid and reliable to give data that sought to address the objectives of the study on enhancing training among persons with physical disabilities in sewing skills.

3.9.1 Validity

Validity refers to the extent to which a measurement procedure actually measures what it is intended to measure (Amin, 2005; Mugenda & Mugenda 1999). The researcher ensured that repeated reviews by experts and supervisors' opinions were incorporated to ensure that the instruments provide the information they are designed to give. This is because review of instruments by more experienced people and field testing on the appropriate population increases validity and reliability of the research instruments (Kakooza, 1996).

3.9.2 Reliability

Interview guides were pre-tested through a test re-test method of pilot samples by ensuring that repeated review of the interview guide by some respondents was done and made the necessary adjustments to establish reliability by comparing the findings. To gain confirmation of valid and reliable data triangulation techniques were employed. Data on the same topic confirmed from other sources strengthened the findings of the study. The rationale for triangulation was to cross check and cross-breed information gathered from different categories of respondents. The technique involved the use of different methods of data collection such as in-depth interviews, focus group discussions and documentary study. Questions were repeated in the instruments to test their answers in relation to what it intends to measure (Sekaran, 2003). Evaluation of the guides was done after comparing the pre tested instruments to establish validity and reliability. The views of supervisors were integrated given their expertise and experience on developing research instruments.

3.10 Data organisation, processing, analysis and presentation

Although information was collected using different methods, data related to each research question was organized together after the process of data collection. Data under each research question was checked for accuracy, consistency, and completeness following the objectives of the study. The data collected was examined and tabulated in relation to the objectives of the study. Answers of the respondents on various questions resulting from each objective of the study were classified.

Data analysis was descriptive and this helped the researcher to establish the major themes and sub themes on which respondents agreed and on which they differed. Then data was processed and analyzed qualitatively. Responses were presented with the aid of verbatim, graphs, charts and pictures photographed at the scene of interviews. The responses were compared in order to print out their actual meaning. Data collected was further cross referenced with the reviewed literature (Mbabazi, 2008:53). This was intended to compare quantitative data with the information collected through face to face interviews and so that meaningful conclusions could be drawn.

3.11 Ethical issues

While carrying out the study due regard was made of ethical concerns. Ely (1991) notes that qualitative research is an ethical endeavor where the researcher has to take into consideration full understanding of the situation. The confidentiality of respondents and their identities were protected and concealed. An appropriate language that did not compromise the identities of the respondents was used together with symbols and numbers to ensure non disclosure of respondents' identities. Participants were informed in advance of the overall purpose, Kvale (1996) notes that informed consent involves informing respondents about the purpose of the research. To this effect, the researcher maintained the

consent of the respondents till the exercise was concluded. The researcher maintained good relationships with the relevant authorities and respondents in the field till the exit date. William cited in Sheffir *et al* (1980:262-263) argues that personal relationships are given special treatment while conducting qualitative research. Failure to comply with this will give respondents an opportunity to pull out of the activity.

In the next chapter, the findings were analyzed, presented and interpreted to give meaning following the specific objectives of the study.

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

4.0 Introduction

The purpose of this inquiry was to undertake an empirical case study to find out how VET equips persons with physical disabilities with sewing skills for the world of work at Providence Cheshire Home Nkokonjeru, Mukono District. This chapter of the study comprise of data presentation, analysis and the interpretation of the results. The analysis was guided by the specific objectives that were used in the study. The presentation of the results was done in three sections. The first section presented the response rate and the second section presents the background information of the respondents who participated in the study in terms of age, gender, level of education, length of service and the benefits offered. The third section present the descriptive statistical analysis of the results following the specific objectives of the study which are to; assess the extent to which the methods used for training persons with physical disabilities in sewing skills are appropriate, examine the extent to which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work find out if the tools and materials used in training persons with physical disabilities equip them with sewing skills to be productive in the world of work and establish if the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work.

4.1 Response Rate

This sub-section presented the summary statistics for the response rates and details were as presented below.

Table 2: Response rate of respondents

Category of respondents	Target Sample	Actual Response	Response Rate
Instructors	10	08	80%
Continuing students	30	26	87%
Graduates in the world of work	10	10	100%
Total	**50**	**44**	**88%**

Source: Self generated data

The data in Table 2 indicate that out of 10 instructors targeted in the sample, 08 were interviewed amounting to a response rate of respondents (80%). Out of the 30 Continuing students surveyed in the sample, 26 completed the interview and were included in the analysis amounting to a response rate of respondents (87 %). Of the 10 graduates in the world of work surveyed in the sample, 10 completed the interviews and were included in the analysis amounting to a response rate of respondents (100%). Finally the total sample size including all the six categories of respondents added to 44 respondents out of the targeted sample of 50 leading to a response rate of respondents (88%). The response rate was considered by the researcher to be optimal and adequate to enable obtain an excellent estimate. The researcher therefore felt confident that with a response rate of respondents (88%) the research findings did provide perfect results.

4.2 Demographic Information of the respondents

This section of the study presented the background information which focused on characteristics of the respondents in terms of age, gender, experience, and the qualifications to establish whether these factors could have an impact on vocational skills training in sewing for learners with physical disabilities.

4.2.1 Age distribution of the respondents

The age distribution of the respondents to the study was summarized in the table below.

Table 3: Age distribution of the respondents

Variable	Sub category	(n)	%
Age (in years)	35+	07	16
	25 – 34	17	38.6
	15 – 24	20	45.4
	Total	**44**	**100**

Source: Self generated data

Among the respondents (16%) interviewed, 07 were aged 35 years and above 17 of the respondents (38.6%) were between 25 and 34 years while 20 respondents (45.4%) were aged 15-24 years. This indicated that the majority of the respondents interviewed were adults.

4.2.2 Gender of respondents

Data on the respondents' sex was obtained and the summary statistics for gender of the respondents to the study are presented in the figure below.

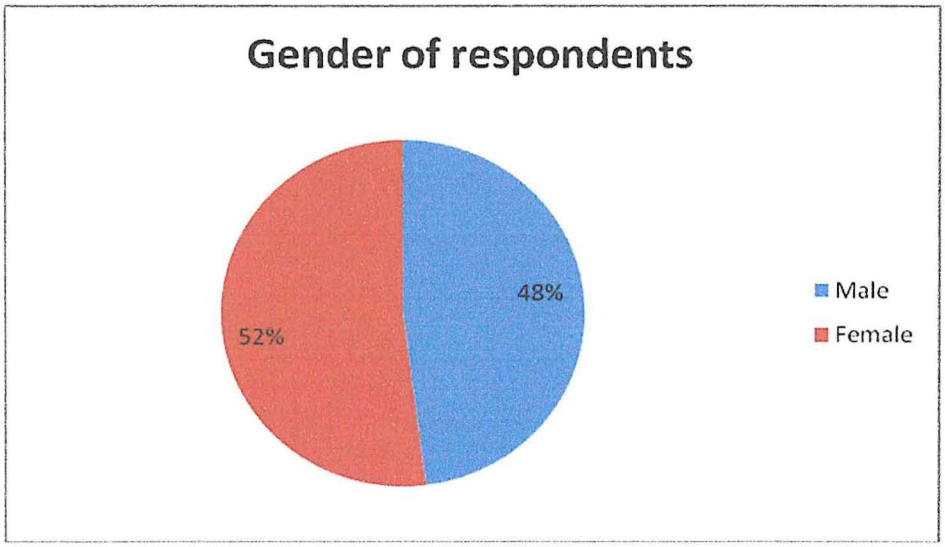


Figure 1: The distribution of respondents by gender

Source: Self generated data

Figure 4.2.2 indicated that among the respondents (48%) were male compared to other respondents (52%) who were female. This confirms with the *Ministry of Education records report* (2010) which shows more female 51.4% than male sales staff (48.6%) population. Further investigations with the recruitment policy of the Ministry confirmed that there was emphasis towards gender mainstreaming.

4.2.3 Length of service

In Table 4, the distribution of respondents by length of service of instructors and people with disabilities is presented.

Table 4: Distribution of respondents by length of service

Period	Frequency	Percentage (%)
less than 1 year	08	18.2
1-5 years	18	41
6-10 years	09	20.4
11 years	05	11.3
above 11 years	04	9.1
Total	**44**	**100.0**

Source: Self generated data

The data in Table 4, shows that among the 08 respondents (18.2%) had worked for less than 1 year however 18 of the respondents (41%) had worked between 1 and 5 years and 09 respondents (20.4%) had worked for 6-10 years and 05 respondents (11.3%) had worked for 11 years and only 04 respondents (9.1%) had spent above 11 years.

4.3 Data analysis and interpretation of objective one which state "To assess whether or not the methods used for training persons with physical disabilities in sewing skills are appropriate."

The study sought to assess whether or not the methods used for training persons with physical disabilities in sewing skills were appropriate, as presented below.

Table 5: Assess whether or not the methods used for training persons with physical disabilities in sewing skills are appropriate

Method	Frequency	Percentage (%)
Illustration	15	34.1
Role play	12	27.3
Individualized	08	18
Experiential	06	13.6
Lecture	03	6.8
Total	**44**	**100**

Source: Self generated data

The study found that 15 respondents (34.1%) explained that illustration method was one of the main methods used in training sewing skills among learners with physical disabilities. Role play was also mentioned by 12 respondents (27.3%) while individualized learning was mentioned by 08 respondents (18%). 06 respondents (13.6%) mentioned experiential method while the only 03 respondents (6.8%) mentioned lecture method.

4.3.1 Determination of choice of methods used in training

The study also sought to establish how the choices of methods used are determined. The results are presented as below:

Table 6 : Determination of choice of methods used in training

Method	Variable	(n)	(%)
Illustration	Attract attention	14	32
	Aid retention	13	29.5
	Students learn fast	10	22.5
	Creates context	07	16
	Total	**44**	**100**
Lecture method	convenient for large groups	19	43.2
	useful to supplement material from other sources	12	27.2
	students receive information from real experts	08	18
	gives direction and purpose	05	11.3
	Total	**44**	**100**
Individualised	Increased student participation	20	45
	Develops creativity among students	14	32
	They do not rely on memorization	06	14
	Students listen to other opinions	04	09
	Total	**44**	**100**
Experiential	Experiments can be replicated	21	47
	Allows for control of variables.	12	28
	Accuracy and reliability	11	25
	Total	**44**	**100**

Source: Self generated data

From the findings, several advantages were advanced as to why the illustration method was used in teaching vocational skills to students with disabilities. Among the respondents 14, (32%) said the method was helpful because it would attract learners' attention as the following statement from the instructor of the Home said:

> Most of the students have wide ranging disabilities including memory lapses. When they reach class, they are dosing or absent-minded. But with illustration, one brings a variety of aids which keep their minds alive and alert.
> (In-depth interview)

13 respondents (29.5%) also said that the illustration method aids retention of ideas by learners; 10 respondents (22.5%) said they learn fast, while 07 respondents (16%) said the method helps to create context. The lecture method was also widely mentioned as one of the methods used to teach learners with disabilities. According to the findings 19 respondents (43.2%) supported the lecture method saying the method was convenient for teaching large groups of students as the following statement from an interview attested:

> Since the teacher-student ratio is too small, this method helps me to combine the students and teach them in bigger groups. Besides, we don't have enough teaching materials to enable us use other methods.
> (In-depth interview)

Among the respondents 20, (45%) supported the individualized method of learning, said the method increased student participation, 14 respondents (32%) said the method developed creativity among students, while 06 respondents (14%) said students did not rely on memorization with this type. Only 04 respondents (09%) said the method helped students to learn from one another.

Another method highlighted was experiential method where 21 respondents (47%) said experiences could be replicated (reproduced) with this method while 12 respondents (28%) said the method allowed control of variables and only 11 respondents (25%) said the method allowed accuracy since students learn by experience.

4.3.2 How instructors support students to learn effectively

The study also sought to find out how instructors helped the students to learn with ease.

Table 7: How instructors supported students to learn effectively

Response	Frequency of occurrence	Percentage (%)
Repeating information	10	22.7
Designing individual programmes	10	22.7
Closer supervision	08	18.2
Using more aids	06	13.6
Case references	04	9.1
Familiarizing with them	04	9.1
Encouraging them	02	4.5
Total	**44**	**100**

Source: Self generated data

From the findings presented in Table 7, 10 respondents (22.7%) said for learners with such type of disabilities, repeating information over and over was the best way to support them to learn effectively. An equal number of 10 respondents (22.7%) also said designing individual practical programmes for the students was another effective way of training. Here is a statement from one of the instructors:

> These students have different problems. For instance, some have hearing defects, memory lapses while some have no limbs etc. So, what a slow student can do is not what one without ribs can do.
> (In-depth interview)

08 respondents (18.2%) pointed out closer supervision as one of the ways they help the learners. However 06 respondents (13.6%) said they use more aids to help the students while 04 respondents (9.1%) said they helped them to learn effectively by using records of person's background and medical history given by a doctor or social worker and

familiarizing with them so that they could share their experiences respectively. Only 02 respondents (4.5%) said they encouraged the learners so as to psychologically boost their confidence.

4.3 3. Challenges encountered in using the above methods

The study also sought to establish the challenges encountered in using the above mentioned methods. The findings are presented below;

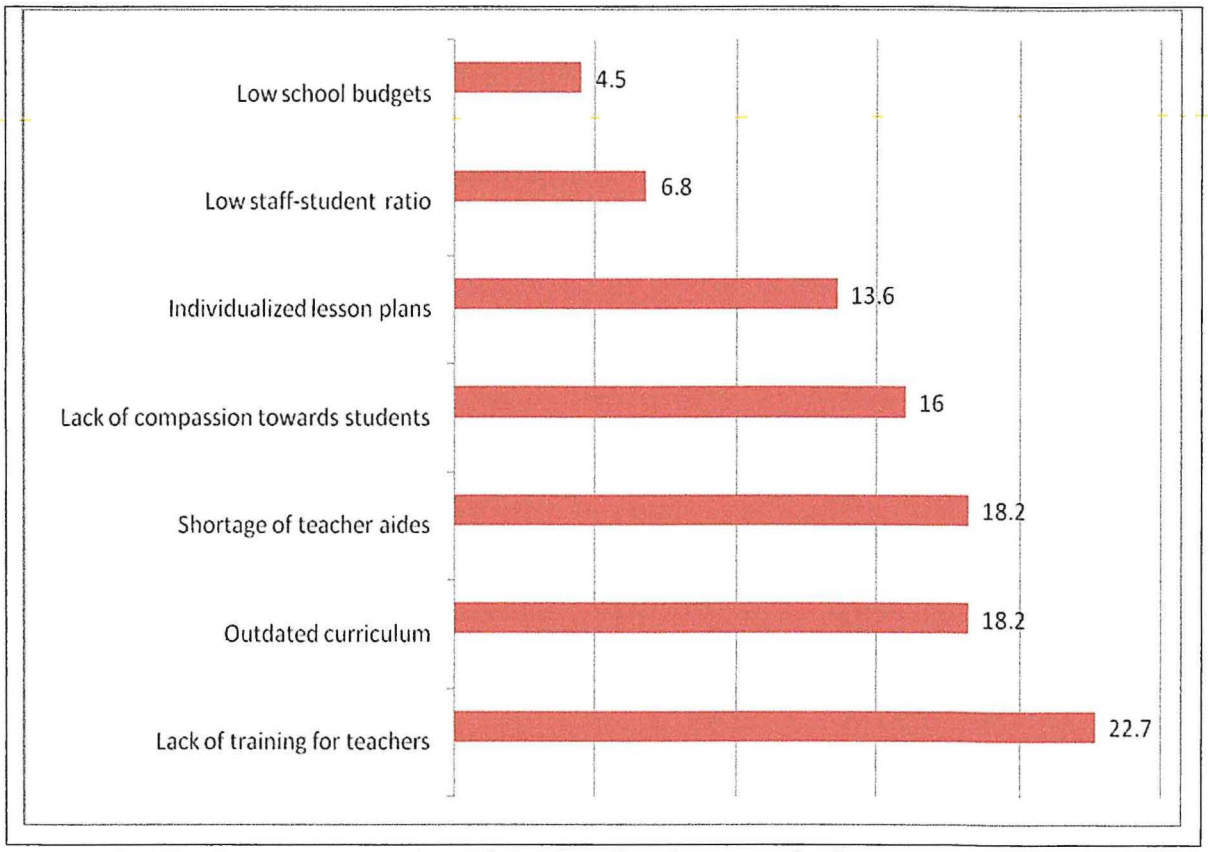


Figure 2: Challenges encountered in using the above methods

Source: Self generated data

From the findings, 10 respondents (22.7%) mentioned lack of experience on the side of instructors on how to deal with learners with physical disabilities. Some teachers said they had not been exposed to special needs classrooms. Educators needed to coordinate efforts and understand the needs of the classroom in terms of developing skills

and lesson plans while 08 respondents (18.2%) said the current curriculum for learners with disabilities was outdated and did not match with the training of sewing skills among learners with physical disabilities. An equal number of 08 respondents (18.2%) also said shortage of teaching aids was a challenge in teaching learners with disabilities as the following statement from an instructor said:

> Normally, inclusive classrooms have a regular instructor and special needs instructors. Due to the nature of the classroom and size, it is imperative that there be an appropriate number of teacher aides to assist the teachers with day to day activities.
>
> (In-depth interview)

Another problem mentioned was lack of compassion shown towards the learners by the instructors and the administrators where 07 respondents (16%) highlighted the issue. This was normally the case when teachers become insensitiveness and cruel and forget that all students are to be treated with respect, regardless of their disability and ability. Another challenge mentioned was the use of individualized lesson plans with 06 respondents (13.6%) mentioning the problem. Because there were varying abilities in the classroom, teachers could be challenged to address individual academic needs based on ability. The low staff-student ratio was also mentioned as a problem from 03 respondents (6.8%) saying the students in the Home were many while instructors were few.

4.4 Data analysis and interpretation of objective two which state, "To examine the ways by which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work.

The study further sought to establish whether the VET curriculum provided met the needs of learners with physical disabilities as presented in Table 8;

Table 8: VET curriculum and the needs of learners

Response	Frequency	Percentage %
It relates to occupational skills	16	36
It caters for PWDs	14	32
Very practical and makes use of supplementary aids	04	09
It is constantly monitored	06	13.6
It is school-based	02	4.5
Consultation of all stakeholders is made	02	4.5
Total	**44**	**100**

Source: Self generated data

From the findings 16 respondents (36%) explained that the curriculum related to occupational skills similarly 14 respondents (32%) said that the curriculum catered for PWDs and 06 respondents (13.6%) said that the curriculum was constantly monitored. 04 more respondents (09%) said the curriculum was very practical and makes use of supplementary aids. An equal number of 02 respondents (4.5%) concluded that the curriculum was school-based and consultation of stakeholders is regularly made. This, they argued that it could not be based at school when the materials are not adequate.

Further evidence of how the content in the curriculum provided meets the needs of learners with physical disabilities, was also adduced from the pictures taken from the Home as shown in figure 3.

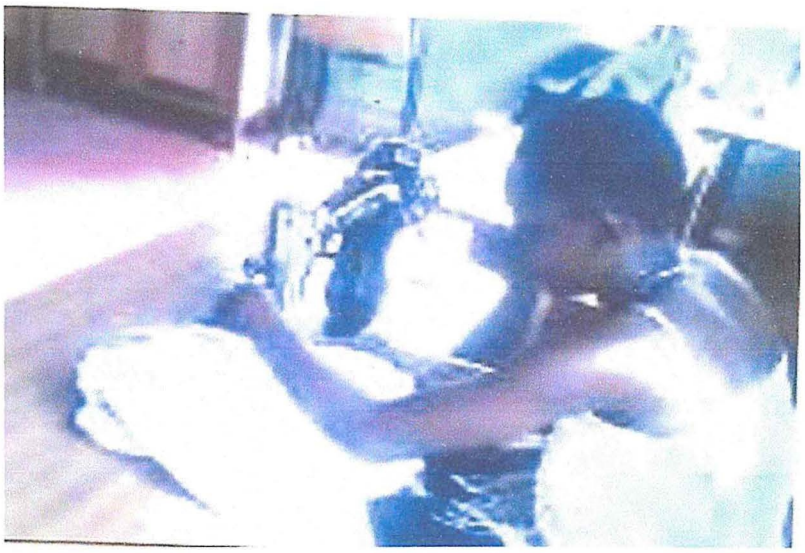


Figure 3: The individualized method of learning intended to make learners acquire skills.
Source: Researcher

The study also found that the learners were also taught how to sew as the following picture shows.



Figure 4: An instructor shows a student how measurements are done for sewing.
Source: Researcher

4.5 Data analysis and interpretation of objective three which state, "To find out how the tools and materials used in training persons with physical disabilities equip them with sewing skills to be productive in the world of work."

The study also sought to establish the tools and materials used in training vocational skills in sewing for learners with physical disabilities. The researcher found that handle and hand sewing machines, scissors, rulers, tape measures, screw drivers, pins, needles, pieces of cloths, sugar papers, pens, lubricating oil, threads, among others.



Figure 5: Materials used in training persons with physical disabilities with sewing skills to be productive in the world of work
Source: Researcher

Below is one of the hand sewing machines used at the Home



Figure 6: Tools used in training persons with physical disabilities with sewing skills
Source: Field photo

4.5.1 Students and instructors' views on use of the tools and materials

The study also sought the respondents' views on the relevance of some of the tools and materials used at the Home.

Table 9: students and instructors' views on use of the tools and materials

Response	Frequency of occurrence	Percentage (%)
They are not enough for learners	17	38.6
They are outdated	14	32
They are expensive to procure	08	18.2
They need specialized usage	05	11.3
Total	**44**	**100**

Source: Self generated data

From the findings, 17 respondents (38.6%) said the tools were not enough for the many learners at the Home, while 14 respondents (32%) said most of the machines were outdated and did not match the modern technology needed to train children with special needs. 08 respondents (18.2%) said some of the materials, when broken, were difficult to repair since they were very expensive while only 05 respondents (11.3%) said some of the tools needed specialized usage and could not be operated by many members of staff.

4.6 Data analysis and interpretation of objective four which state, "To establish how the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work."

The study further sought to establish the kinds of activities that learners with physical disabilities underwent during vocational skills training. The results were presented below;

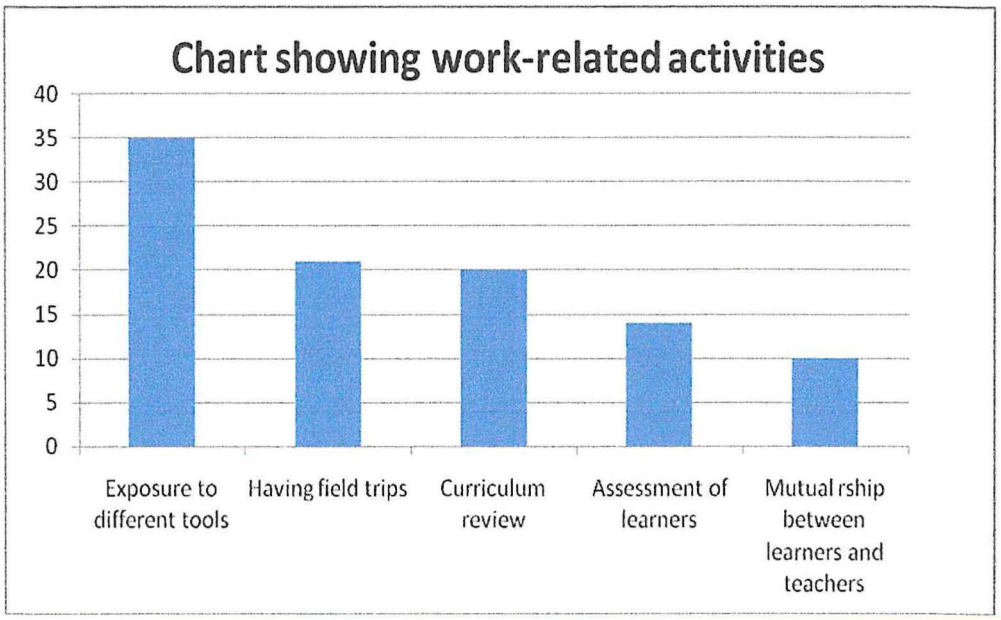


Figure 7: Work related activities for training learners with physical disabilities in vocational skills

Source: Self generated data

From the findings, 16 respondents 35% said they were exposed to different working tools that were used in the world of work as well. 09 respondents (21%) said they occasionally got field trips, with visits to workshops and other vocational training schools from where they acquired practical experiences. However, 08 respondents (20%) said the curriculum was always subjected to review to match with the work-related demands. 06 respondents (14%) also mentioned the constant assessment of learners to ensure that they met work-related standards. Only 05 respondents (10%) said there was mutual relationship between learners and instructors who encouraged them and gave them skills on how to survive in the work place. For exposure to different working tools, it was established that the learners were engaged in sewing, gardening, craft making, and mechanics, among others.

The pictures below showed learners performing some of the activities.

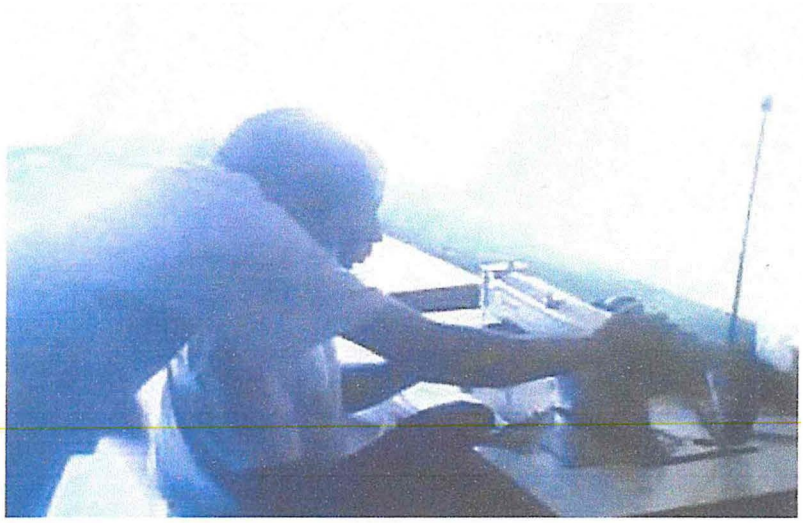


Figure 8: An instructor shows a learner how to repair a sewing machine.
Source: Researcher

It was found out that learners do most of the activities for themselves as shown below;



Figure 9: Learners chopped wood at the Home.

Source: Field photo

Learners were also found to have other small projects that the instructors said are supposed to prepare them to live an independent life.



Figure 10: A learner showed her garden at the Home.
Source: Researcher

4.7 Respondents' views on the work-related activities for training learners with physical disabilities in vocational skills

The study further sought to establish the kinds of challenges encountered in emphasizing - related activities for training learners with physical disabilities in vocational skills. The findings were presented below;

Table 10: Work related activities for training learners with physical disabilities in vocational skills

Response	**Frequency of occurrence**	**Percentage (%)**
Lack of appropriate infrastructure and facilities	18	41
Unavailability of competent trainers	13	29.5
Activities are expensive to implement	08	18
Materials are inadequate	05	11.5
Total	**44**	**100**

Source: Self generated data

From the findings, 18 respondents (41%) viewed the lack of appropriate infrastructure as one of the major challenges towards the implementation of work-related activities. Most respondents mentioned absence of facilities where they could train and acquire the skills. 13 respondents (29.5%) mentioned unavailability of competent trainers to train work related activities. However, 08 respondents (18%) said implementing work-related activities was difficult because they were expensive while only 05 respondents (11.5%) specified that the materials were not enough for all the learners.

In the next chapter, the researcher discussed the results of the empirical study which were further compared with the facts from the literature study to draw conclusions and made recommendations. Hence identified areas that needed to explore further and find answers which emerged from the research.

CHAPTER FIVE: DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

The purpose of this inquiry was to undertake an empirical case study to find out how VET equips persons with physical disabilities with sewing skills for the world of work in Providence Cheshire Home, Nkokonjeru in Mukono District. The specific objectives were to; assess the extent to which the methods used for training persons with physical disabilities in sewing skills are appropriate, examine the extent to which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work, find out if the tools and materials used in training persons with physical disabilities equip them with sewing skills to be productive in the world of work and to establish if the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work. This chapter presents the discussion, conclusion, and recommendations of the study coupled with areas that needed further research.

5.1 Discussion

5.1.1 Assess whether or not the methods used for training persons with physical disabilities in sewing skills are appropriate.

The study found out that many methods were used in supporting learners with physical disabilities in training sewing skills. The illustration method was the most commonly used method. Role play, individualized learning and experiential method and the lecture method were also mentioned. The use of the illustration method as the most commonly used method, however with an earlier assertion by Freire (1972:53) who said that the most common teaching method used by the teaching staff at the tertiary level was

the lecture method. The illustration method though was in line with Chapell, (2004) who said, many instructors and trainers use pedagogical strategies that are based on constructivist views of learning such as small group work, discussion, debate, practical problem solving, the presentation of alternative perspectives, sharing of information, reflective practice, cognitive apprenticeships, modeling, mentoring and coaching may be used. The illustration method being the most favored method was supported by Russell N. Carney and Joel R. Levin, (2002) who assert that carefully constructed text illustrations generally enhanced learners' performance on a variety of text-dependent cognitive outcomes. For the challenges encountered in using the above methods, most respondents mentioned lack of experience on the side of teachers on how to handle learners with physical disabilities. Some teachers said they had not been exposed to special needs classrooms. This was in disagreement with earlier findings by Kauffman (1999) who pointed out that teachers were unprepared to teach due to poorly supported infrastructure facilities including instructional materials.

In Providence Cheshire Home, instructors illustrate the text details to be done and later group learners in teams to practice the same illustrations as a group then eventually the activities are re-practiced individually for mastery of the skills. Group/teamwork is one of the basic principles in vocational pedagogy. In support of teamwork, Wlodkowski (2004:147) asserts that learners feel connected in a group when they share a common purpose and a sense of mutual care exists. He argues that people in the group care about each other as they pursue their joint goal. In a group, people feel included and are freer to risk mistakes where true learning occurs (Mjelde, 2006a). Therefore the norms we set as instructors and the strategies we use as we teach largely determine the quality of social exchange, equity, collaboration, and expression of each learner's perspectives in group

tasks. In his argument about the human and task aspects of work, Nilsson (2008b:3) explains the need to feel loved and involved if work/learning must take place. Everyone must have a feeling of being loved, accepted and needed for productive participation in a task. This is possible if we give group tasks to encourage learners' mutual cooperation and respect of one another. Similarly, in Providence Cheshire Home instructors should further encourage group working methods for acquisition of the sewing skills though the student ratio is high.

5.1.2 Examine the ways by which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work.

From the findings, there were mixed views on the appropriateness of vocational programmes in preparing students with physical disabilities for employment. Respondents disagreed on whether curriculum was related to occupational skills and practical. From the analysis, trainees with physical disabilities did not have opportunity to learn different trades neither did they have the opportunity to select vocations of their interest since the programmes are few. According to Sabou, (1999), curriculum for learners with physical disabilities ought to be designed to meet the unique needs of the learners. Such a curriculum would emphasize the following areas; self-help skills, social adjustment in the Home and neighborhood as well as economic usefulness. The vocational curriculum cannot operate in vacuum (Smith, 2000) besides, leaving the curriculum to be decided at the discretion of teachers is counterproductive, instead there should also be well elaborated procedures detailing how knowledge and skills should be imparted. The Salamanca Statement and Frame work for Action on Special Needs Education (UNESCO, 1994) provides that, schools should provide curricular opportunities to suit children with different abilities and interests. Muuya (2002) suggests that rather than the more

appropriate curriculum combining literacy and numeracy with functional academics and life skills training discussed earlier, programmes for children with disabilities focused more on behavioural control, expression and moral behaviour. This also confirms the need for PWDs to acquire knowledge and skills in BTVET so that they would be able to cater for their own needs and other peoples' needs in society. Lack of compassion shown towards the learners by the instructors and the administrators was also mentioned. These clashed with the law in the United Kingdom which said that state schools must do their best to see that special help was provided for all children with special needs. In this case the Local Education Authority was expected to make assessment of a child's educational needs, based on specialist advice (*BBC*, 2005). In case of Uganda, Article 35 of the *constitution of Uganda* (1995: 52) states that Parliament shall enact laws appropriate for the protection of persons with disabilities.

The *Thabo Mbeki Development Trust (TMDT) Annual Report* (2007/2008: 14) said assistive devices were essential to the independence of learners and their ability to cope with learning or travel to and from training venues. Kizito (1993) reminds teachers that the main responsibility of a teacher was to take the existing curriculum framework and match it with the needs of the individual students while taking into consideration any special needs that may exist. Farrant (1994) observed that in order to teach effectively the tutor must be an example to the students in the styles and method they used. This means that if instructors had negative feelings towards teaching PWDs in BTVET institutions and work places, students too could develop the same feelings towards learning. Therefore, teaching and learning should motivate learners and instructors. For example, like in the NOMA programme active participation was paramount. A major feature of the methods of work in this Masters programme was the active participation and input by the students

themselves. As far as possible the students were expected to participate in and contribute to the development of the programme of studies.

The students were invited constantly to assess the programme of studies through participation in planning learning activities and systematic exchange of experiences with their mentors and fellow students. Hence the coordinators and mentors had a particular responsibility to facilitate cooperation with each other and students in order to advance the programme. This was brought about through the detailed working out of the day-to-day programme of studies by the professors, providing the details of activities for the semester, the study year and for each individual module and doing so in regular consultation with the students and the supervisors/mentors responsible for each group, as well as calling for regular feedback from students.

The study discovered that for learners with physical disabilities, repeating information over and over was the best way to support learners and designing individual programmes for the students was another effective way of training. The idea was developed by Lev Vygotsky (cited in Mjelde, 2006a) said that lecturers ought to be partners with students in the exploration of critical thinking and critical attitudes. Heimlich and Norland (cited in Galbraith, 2004:4) contend that "teaching is a skill and a gift, a talent and a technique". To them good teaching would be a balance of understanding oneself as a teacher and knowing how to develop learning encounters that are meaningful and useful in the promotion of personal and professional growth. There is need to have adequate preparation involving the learners in construction of their learning encounters if they have to find meaning (Biggs, 2003). Providence Cheshire Home supports disabled people with mobility appliances, literacy trainings to equip persons with physical disabilities with basic knowledge and skills to exploit the environment for self and

national development as indicated in the national educational goals, aims and objectives of the government white paper of Uganda (1992: 6-8& 116).The home also facilitates their access to livelihoods opportunities like in baking, tailoring, and handicraft through support for skills development and access to employment in both formal and informal sectors. The opportunities can be attained if they are given skills to make a living; such skills ought to be included in a curriculum which is used in the training institutions. However, this still remains a big challenge such a vocation education curriculum soon becomes outdated when steps are not taken to review it regularly to meet the needs of learners (Finch & Crunkilton, 1999).Therefore this calls for making a curriculum that meets the needs of learners with physical disabilities for the world of work.

In teaching vocational skills to learners with physical disabilities, the respondents also said that closer supervision, use of teaching aids and familiarizing with them so that they could share their experiences could help them to learn effectively. Werner, (1996:497), Polloway and Patton (1992:80) supports the above principle that when a teacher treats a learner with special needs with respect, and give him/her encouragement, the child would benefit greatly from school both educationally and socially. They also suggested that instructors did not have to follow a particular method but use a variety of teacher directed, child-directed and peer-mediated approaches. The behavior to be learned can be actively reinforced through demonstration under the guidance of the instructor in cooperation with fellow students in order for them to realize full benefits from vocational education. The principles mentioned above were fundamental to the NOMA masters two year programme. The researcher experienced learning by doing, trying and failing and trying again with close supervision from both the mentors and the facilitators, rotating from workplaces to lecture room and writing mini-reports, learning on this programme

was based on activity. At the beginning of the course of studies, time was devoted to develop a good, binding, safe and constructive climate of cooperation and fellowship in the learning groups. This was highly important for our progress, well-being and the quality of our work. Each learning group was composed of 7 students and 2 mentors. The learning groups were organized in a heterogeneous way (Because the greater the mix of backgrounds, genders, ages and regions, the richer the group experience would be).

The mentors formed the learning groups on the basis of the principle of randomness which is a central principle of research methodology whereby one chooses respondents on research projects in a random manner. In addition, they have employed "cluster sampling" in order to create relatively equal groups, such that students from Southern Sudan were distributed in all three groups and to ensure as much gender balance as possible in each group. Achieving a variation in trades and professions was also vital; this helped me to take note of the relationship between the theory learnt and the practice.
In terms of learning needs, it was undesirable to treat the disabled students as a separate category. Rather, these students fell along a range of learner differences and shared similar challenges and difficulties that all students faced in higher education. Powers (1983) opines that instructors must train students to form values and habits that would not only make them capable citizens but help them to develop positive feelings, show initiatives, assist those in need and lives which offer good examples to others. The study findings mentioned that the current VET curriculum for learners with disabilities was outdated and did not match with the modern needs of the children. This supports an earlier assertion by the *UNEVOC* (1993:3) cited in Ogwang (2009:12) that, "due to lack of resources, experience and traditions, developing countries simply tend to copy existing curriculum materials from industrialized nations without proper adoption to the local situations and

needs. As a consequence of such curriculum, the content is not usually rooted in people's culture. Liang (2004: 40) also asserts that the content taught in VET institutions in Uganda was a version of the Oxford/London syllabuses of the 1950s. Accordingly, curriculum was supposed to be revised after every four years but little is been done at the NCDC despite the community outcry (Kikomeko & Chebet, 2009). Curriculum for learners with physical disabilities should be designed to meet the unique needs of the learners (Sabou, (1999). In general sense, education is guided learning to help a child gain skills and understanding for meeting lives needs (Werner, 1996:497).From the researchers point of view, as a child grows up in a global world, many additional skills and knowledge are needed. The knowledge and skills can be achieved under the mentorship and guidance of a caring teacher. Instructors therefore, have the crucial role of guiding these learners with physical disabilities to ensure they learn satisfactorily.

5.1.3 How the tools and materials used in training persons with physical disabilities equip them with sewing skills to be productive in the world of work.

Across the interviews with the various respondents, the issue of inadequate finances emerged as one single and constant factor, ranging from procuring assistive devices for children with special needs; aligning the curriculum to suit the needs of these children; training of teachers and to modify physical infrastructures *et al*. These aspects directly or indirectly impede progress in the realization of the right to education for PWDs. Nilsson (2011) asserts that understanding which working tools to be used was a very important part of planning function in the training institutions. This implies that the working tools and materials ought to be in a good working condition. He further stated how to master the tools in order to achieve waited work results was very important and there was need to pay attention to that. Similarly, in Providence Cheshire Home some

learners take long to learn a skill because the tools and materials are few, out dated and dangerous to the users. Therefore the tools must be in a good condition such that they do not cause damage to humans and work materials. Kauffman (1999) pointed out that teachers were unprepared to teach due to poorly supported infrastructure facilities including instructional materials. Similarly, (Atim & Okot, 1998) report the problem of provision of tools and materials as one of the challenges in institutions. In support of this view, Mbiti (1981) asserts that the contributing factors to the poor quality of education in many developing countries is lack of adequate tools and materials and proper physical facilities which are conducive for effective learning. However, what is being practiced in institutions leaves a lot to be desired because where there is need to provide tools and materials to the physically disabled e.g. sewing machines in this case, handle and hand driven machines and readily available materials are lacking. This has caused a lot of negative perception on PWDs to enroll for VET in most institutions. Many institutions lack tools and materials and where they are present, they are old and not accessible respectively therefore this has continued to stigmatize PWDs.

There is a clear and growing need for assistive devices to help address the special educational needs of students as an ever increasing number of learners with special needs seek to realize their full potential through education. Therefore learners in Providence Cheshire Home with physical disabilities, require assistive technologies/devices like electric machines, wheel chairs. In many cases, assistive devices are essential to the independence of learners and their ability to cope with learning materials or travel to and from training venues. In the *Thabo Mbeki Development Trust (TMDT) Annual Report* (2007/2008: 14), it was stated that a learner without arms who wrote with her feet faced unique problems. The Report also pointed out that, a specially designed folding table was

made for her and this did much to ease the situation, hence improving her learning condition. In the same *TDMT Annual Report* (2007/2008: 14) a female learner with physical disability had difficulty in mobility as her wheel chair was heavy. The TMDT also provided her with a light-weight wheelchair and cushion that assisted her with improving her learning process, life and independence. These basic findings help to drive the point Home as to how available assistive devices like wheel chairs *et al* enhance the learning process of students with physical disabilities in vocational institutions.

5.1.4 How the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work.

From the findings, it was established that the learners are engaged in sewing, gardening and craft making among others. This was supported by Nuwagaba (2012:29) who assert that the competence in using tools to impart practical skills was needed in vocational institutions to equip trainees with employable knowledge. He suggested that "countries that had solved unemployment problems rapidly had built on an education that taught nationals practical skills that was missing in Uganda's education." Therefore, visual tools were also useful for helping students to understand what behaviours were expected of them. Using charts to map students' progress was very effective as a means of providing positive reinforcement for appropriate, on-task behaviour in conjunction with a token economy. Individuals with physical disabilities required immediate feedback in order to make a connection between their answers, behaviours, or questions and the teacher's responses. A delay in providing these immediate feedbacks may disrupt the formation of a connection between cause and effect in the student's mind, and the learning point may be missed.

However, the study noted challenges such as lack of appropriate infrastructure, equipment, learning aids and assistive devices, and availability of competent trainers. The high student ratio was also mentioned as a problem, with most of the respondents saying the students in the Home were many while instructors were few. As earlier mentioned, Kauffman (1999) said teachers were unprepared to teach due to poorly supported infrastructure facilities including instructional materials. Similarly, (Atim & Okot, 1998) report the problem of provision of tools and materials as one of the challenges in institutions. Sarbah and Gidiglo, (2003) state that appropriate resources, training facilities and vocational instructors ought to be made available in the training and development of students with physical disability. These authors pointed out that for a successful vocational training for the physically disabled, there should be enough resources and vocational instructors in the special institutions in Uganda. However at Providence Cheshire Home, learners minimally experience the work place learning during their training and then go to work with little experience in the world of work. Okinyal (2006) puts it that vocational education is practical oriented and its success is dependent on the availability of teaching materials, tools, machines and equipment. So the more familiar the learners are with tools, the more easily they can use them without difficulties in the place of work.

He also argues that the learners need to be exposed to different types of tools and materials because if these are grossly lacking in the institutions learners will not have much competencies directly required in the labour market. In agreement with Okinyal, learners familiarity with tools and materials is very important in vocational training and skills acquisition and the success of vocational training requires the understanding and proper use of tools and materials by both the learners and the instructors. The success of

this is dependent on the close linkage between the training institutions and the world of work. Therefore linking VET with the world of work calls for identification of; Clients (individual, family, community, society, industry and nation), purpose (individual, community, national development/empowerment), gap (knowledge about the curriculum, skills of technology and training process, attitudes), scope (It could be: a specific job, career, work or life), content (general Vs specific, technologies Vs Traditional delivery approaches) and defining the process of vocational education (classroom based Vs experience based, course centered Vs individualized.(Kikomeko,2011).

5.2 Conclusion

The study was to undertake an empirical case study to establish the training of sewing skills for learners with physical disabilities in relation to the world of work.

The study aimed at fulfilling the following research objectives:

- To assess whether or not the methods used for training persons with physical disabilities in sewing skills are appropriate.
- To examine the ways by which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work.
- To find out how the tools and materials used in training persons with physical disabilities equip them with sewing skills to be productive in the world of work.
- To establish how the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work.

From the discussion on objective one, the teacher's role requires so much focus on improvement on the quality of life and transformational changes for the learners with

physical disabilities. Besides, teachers are to identify and modify the educational curriculum as needed to meet the individual needs. Teachers should teach with various techniques including basic effective communication and social interaction. The teachers should show activeness and demonstrate intensive training to set personalised goals. in case for older students with physical disabilities activities of daily living are paramount.

The ideas in the discussion on objective two agree that there is some positive correlation between education and attitudes as well as the role of teachers' beliefs and ideas indicate the need to educate teachers before acceptance and accommodation of students with disabilities can really occur.

The need for vocational training tools and availability of resources, both human and materials were identified as crucial for effective education of students with physical disabilities from the discussion on objective three. There was still inadequacy of resources in terms of human, financial, instructional materials and assistive devices/technology for schools for with students with physical disabilities.

Even though curriculum for special schools for students with physical disabilities outlines some vocational skills needed to enhance independent living and employability of students with physical disabilities in objective four, students who have gone through such programmes are unprepared to meet the demands of life after school. As a special educator, the researcher has noted that many past students of the special schools are not able to demonstrate the skills they had learned at the school because of the continued existence of negative attitudes about persons with special needs.

5.3 Recommendations

The recommendations require attention to the following: Provide all teachers (general and special education) with a background in content knowledge and specialized instructional strategies to meet the needs of diverse learners. Integrate the concept differentiated instruction in both general and special education methodology coursework in training institutions. Ensure that teachers have ample opportunities to see, experience, and participate in guided practice with feedback on instructional strategies proven to be effective in inclusive environments. Such strategies include differentiated instruction, learning strategies, and classroom organization and behavior management. Instructors in vocational institutions should endeavor to work together and incorporate pedagogical practices in the teaching and learning among persons with disabilities so as to enhance vocational skills training

All teachers in training institutions need to be provided with practical information on what they can do in the classroom, how they can identify and assess children with disabilities, develop competences and use students abilities in teaching and learning of vocational skills.

The researcher advises that instructors should teach with various techniques including basic effective communication and social interaction in order to capture the learners' interests.

The researcher encourages instructors and administrators in vocational institutions to set up income generating projects so as to upgrade their financial status and purchase some materials to enhance vocational skills training for world of work. The results revealed that the various assistive devices available in Providence Cheshire home improved learning for students with physical disability in one way or the other, although

the assistive devices were said to be inadequate however the administrators should also work towards lobbying funds from the Non-Government Organisations (NGOs) so to enhance vocational Training in Cheshire Home, Nkokonjeru.

Instructors of vocational institutions training persons with disabilities and policy makers in the educational sector need to use the inclusive curriculum to assist in the preparation programs and identifying gaps in the essential inclusive services like knowledge about the curriculum, skills of technology and training process, attitudes and level of implementation in the programs as well as monitoring and evaluation of all the institutions' activities.

5.4 Areas for further research

These issues deserve further investigations in order to promote VET in vocational institutions towards learners with physical disabilities in Providence Cheshire Home in Mukono Uganda;

1. Recruitment policy of special instructors trained in special needs education by the MOE&S.

2. Training needs of instructors for persons with disabilities in vocational institutions.

3. The role of members of the community in promotion of vocational education and skill training for persons with physical disabilities.

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APPENDICES

APPENDIX I: CONSENT FORM

Dear Respondent,

I am Matinyi, Veronica from Kyambogo University pursuing a Masters Degree in Vocational Pedagogy. I am carrying out a study on "Enhancing Training in sewing skills among Persons with Physical Disabilities".

I humbly request you to provide honest information that will be used to improve vocational education and training in Uganda. The information given will not be used for any other purpose other than academics and will be treated with utmost confidentiality.

Thank you

APPENDIX II: INTERVIEW GUIDE FOR INSTRUCTORS TRAINING VOCATIONAL SKILLS IN SEWING

Section A: Demographic Information

i. Age.....

ii. Experience .....

iii. Sex.....

iv. Qualification.....

Section B: Research Objectives

For purposes of clarity the specific objectives will be denoted by letters A1, B2, C3, and D4 respectively.

A1: To assess whether or not the methods used for training persons with physical disabilities in sewing skills are appropriate.

1. What methods do you use in delivering the content of vocational skills in sewing when you teach learners with physical disabilities?

2. How do you determine the choice of methods you use?

3. How do you support your students to learn effectively?

4. What challenges do you find in the methods you have mentioned?

B2: To examine the ways by which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work.

5. How is the curriculum used in your institution prepared?

6. Of what relevance is the curriculum to the needs of learners with physical disabilities?

7. How does the curriculum relate to the graduates occupational skills?

8. What are the likely challenges posed by the curriculum to learners?

C3: To find out how the tools and materials used in training persons with physical disabilities equip them with sewing skills to be productive in the world of work.

9. What types of tools and materials do you use in the training?

10. How are the tools and materials acquired for the training?

11. How competent do students become at the end of the training when they use the tools?

D4: To establish how the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work.

12. In what ways do you think the training equips learners with practical skills?

13. How is theory knowledge balanced with practical skills acquisition?

14. In what ways do you involve students in the evaluation of their learning process?

Thank you for participating in this interview

APPENDIX III: INTERVIEW GUIDE FOR STUDENTS TRAINING IN VOCATIONAL SKILLS IN SEWING

Section A: Demographic Information

1. Age.....
2. Experience .....
3. Sex.....
4. Qualification.....

Section B: Research Objectives

For purposes of clarity the specific objectives will be denoted by letters A1, B2, C3, and D4 respectively.

A1: To assess whether or not the methods used for training persons with physical disabilities in sewing skills are appropriate.

1. What methods do instructors use in delivering the content of vocational skills in sewing?
2. How do they determine the choice of methods mentioned?
3. How do instructors support you to learn effectively?
4. What challenges do you find in the methods you have mentioned?

B2: To examine the ways by which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work.

5. How is the curriculum used in your institution prepared?
6. Of what relevance is the curriculum to your needs?
7. How does the curriculum relate to the graduates occupational skills?
8. What are the likely challenges posed by the curriculum to you as students?

C3: To find out how the tools and materials used in training persons with physical disabilities equip them with sewing skills to be productive in the world of work.

9 What types of tools and materials do you use in the training?

10 How are the tools and materials acquired for the training?

11 How competent are you at the end of the training when you use the tools and materials?

D4: To establish how the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work.

12 In what ways does the training equip you with practical skills?

13 How is theory knowledge balanced with practical skills acquisition?

14 In what ways are you involved in the evaluation of the learning process?

Thank you for participating in this interview.

APPENDIX IV: INTERVIEW GUIDE FOR GRADUATES TRAINED IN VOCATIONAL SKILLS IN SEWING

Section A: Demographic Information

1. Age.....
2. Experience .....
3. Sex.....
4. Qualification.....

Section B: Research Objectives

For purposes of clarity the specific objectives will be denoted by letters A1, B2, C3, and D4 respectively.

A1: To assess whether or not the methods used for training persons with physical disabilities in sewing skills are appropriate.

1. What methods did instructors use in delivering the content of vocational skills in sewing?
2. How did they used determine the choice of methods mentioned?
3. Did the instructors support you to learn effectively? Yes/No

   If yes, explain how?

   If no, give reasons
4. What challenges did you find in the methods mentioned?

B2: To examine the ways by which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work.

5. How was the curriculum used in your institution prepared?
6. Of what relevance was the curriculum to your needs?
7. How does the curriculum relate to the graduates occupational skills?

8. What are the likely challenges posed by the curriculum to you as a graduate?

C3: To find out how the tools and materials used in training persons with physical disabilities equip them with sewing skills to be productive in the world of work.

9. What types of tools and materials did you use during the training?

10. How were the tools and materials acquired for the training?

11. How competent were you at the end of the training when you used the tools and materials?

D4: To establish how the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work.

12. In what ways did the training equip you with practical skills?

13. How was theory knowledge balanced with practical skills acquisition?

14. In what ways were you involved in the evaluation of the learning process?

Thank you for participating in this interview.

APPENDIX V: FOCUS GROUP DISCUSSION GUIDE FOR STUDENTS

For purposes of clarity the specific objectives will be denoted by letters A1, B2, C3, and D4 respectively.

A1: To assess whether or not the methods used for training persons with physical disabilities in sewing skills are appropriate.

1. What methods do instructors use in delivering the content of vocational skills in sewing?
2. How do they determine the choice of methods mentioned?
3. How do instructors support you to learn effectively
4. What challenges do you find in the methods you have mentioned?

B2: To examine the ways by which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work.

5. How is the curriculum used in your institution prepared?
6. Of what relevance is the curriculum to your needs?
7. How does the curriculum relate to the graduates occupational skills?
8. What are the likely challenges posed by the curriculum to you as students?

C3: To find out how the tools and materials used in training persons with physical disabilities equip them with sewing skills to be productive in the world of work.

9. What types of tools and materials do you use in the training?
10. How are the tools and materials acquired for the training?
11. How competent are you at the end of the training when you use the tools and materials?

D4: To establish how the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work.

12. In what ways does the training equip you with practical skills?
13. How is theory knowledge balanced with practical skills acquisition?
14. In what ways are you involved in the evaluation of the learning process?

Thank you for participating in this discussion

APPENDIX VI: RECORD FORM FOR RESEARCH OBJECTIVES A1, B2, C3 AND D4

Specifications Book/Website

Title of book / Website visited:.....

Year of publication / Date and time website visited:.....

Author (if applicable):.....

City (If applicable):.....

A1: To assess whether or not the methods used for training persons with physical disabilities in sewing skills are appropriate.

B2: To examine the ways by which the VET curriculum equips persons with physical disabilities with sewing skills relevant for the world of work.

C3: To find out how the tools and materials used in training persons with physical disabilities equip them with sewing skills to be productive in the world of work.

D4: To establish how the work related activities persons with physical disabilities do in the VET institutions equip them to fit in the world of work.

APPENDIX VII: INTRODUCTORY LETTER FROM KYAMBOGO UNIVERSITY

KYAMBOGO UNIVERSITY

P. O. Box 1 Kyambogo, Phone: 041-285001/2 Fax: 041-220464, Kampala
www.kyambogo.ac.ug
FACULTY OF VOCATIONAL STUDIES
DEPARTMENT OF ART & INDUSTRIAL DESIGN

Date: 14TH JANUARY 2013

To:
THE ADMINISTRATOR
PROVIDENCE CHESHIRE HOME, NKOKONJERU
MUKONO DISTRICT

RE: LETTER OF INTRODUCTION

This is to introduce Mr/Ms/Mrs. MATINYI VERONICA,
Registration No. 2011/U/HD/285/MVP who is a student of Kyambogo University pursing on a post graduate programme in Vocational Pedagogy.

He/She intends to carry out a research in:
ENHANCING TRAINING OF SEWING SKILLS AMONG PERSONS WITH PHYSICAL DISABILITIES: A CASE OF PROVIDENCE CHESHIRE HOME NKOKONJERU UGANDA
as partial fulfillment of the requirements for the award of the Degree in Masters of Vocational Pedagogy.

We therefore kindly request you to grant him/her permission to carry out the research at your organization.
Any assistance accorded to him/her shall be highly appreciated.

Thank you.

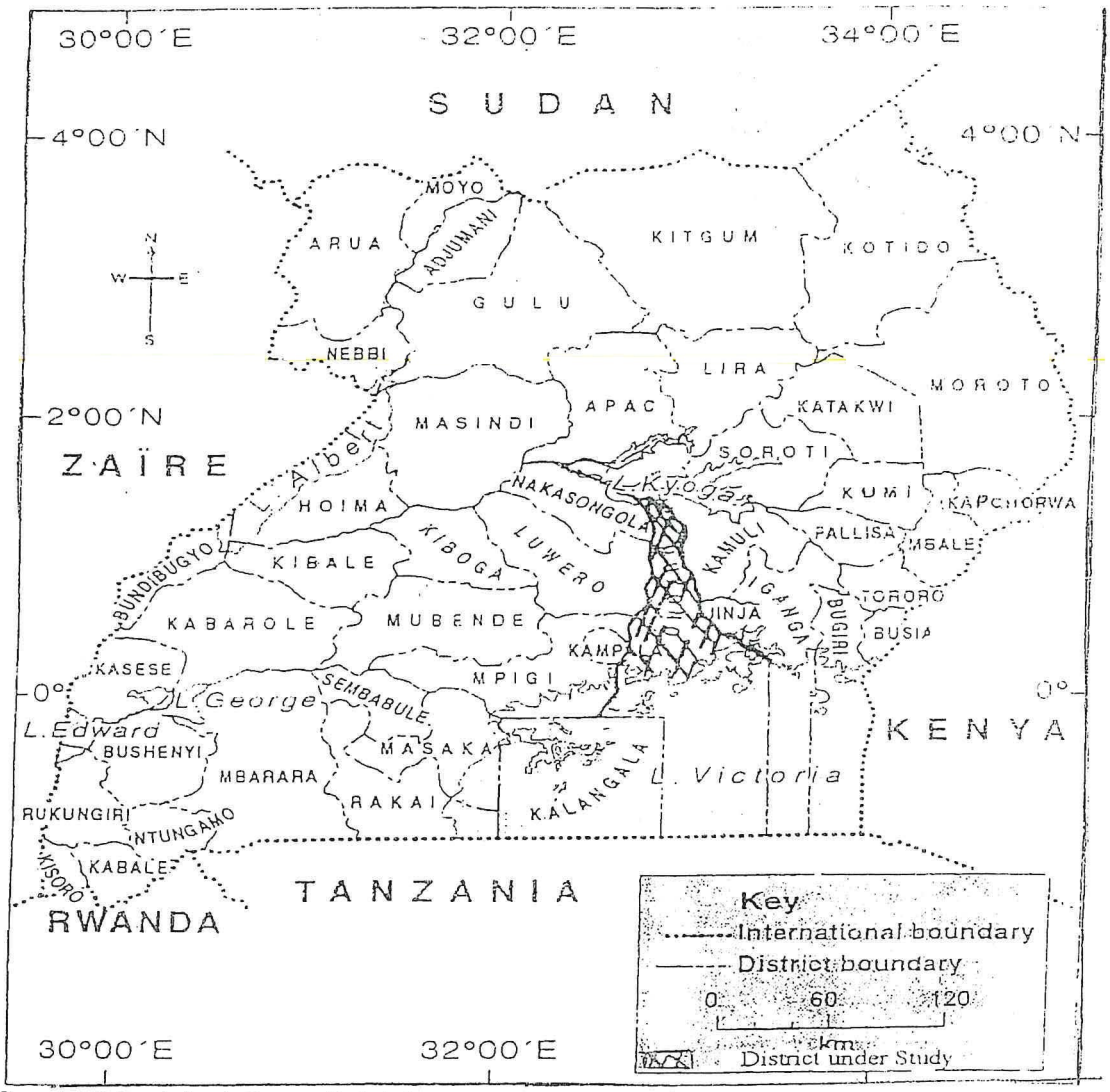
Yours Faithfully,

KYAMBOGO UNIVERSITY
★ 09 JAN 2013 ★
DEPARTMENT OF ART AND INDUSTRIAL DESIGN

Mugisha John
Ag. Head of Department
Art and Industrial Design

APPENDIX VIII: A MAP OF UGANDA SHOWING MUKONO DISTRICT.

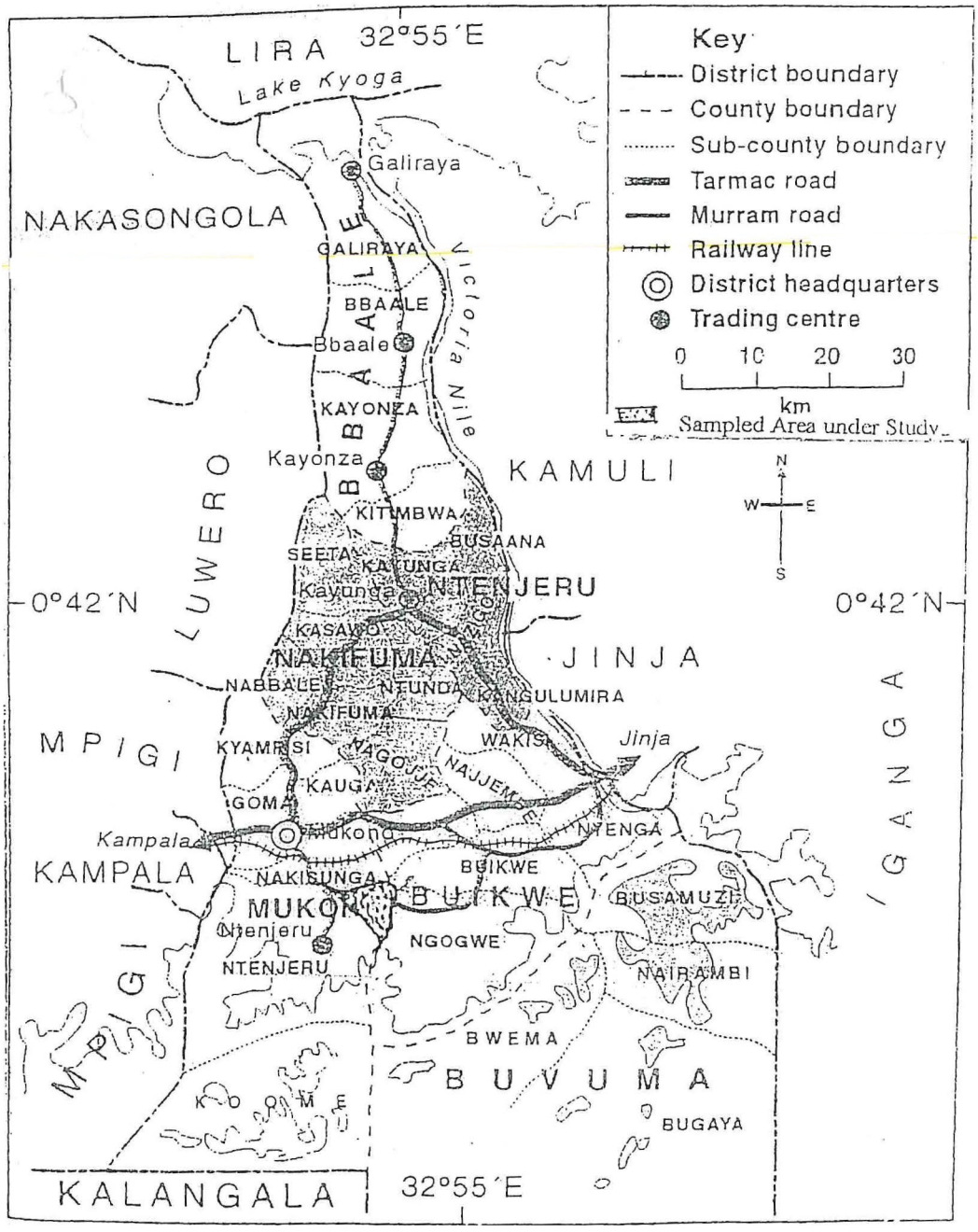
MAP OF UGANDA SHOWING MUKONO DISTRICT



Source: Municipal Council, Mukono

APPENDIX IX: A MAP OF MUKONO DISTRICT SHOWING NKOKONJERU SUB-COUNTY

MAP OF MUKONO DISTRICT SHOWING NKOKONJERU SUB-COUNTY



Source: Municipal Council, Mukono