

Teachers' Facilitation of Learning for Learners with Disabilities in Inclusive Classrooms in Tanzania

Teachers' Use of Interactive Teaching Methods in Inclusive Classrooms

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ABSTRACT

The purpose of this study was to examine how teachers facilitate learning to learners with disabilities in inclusive classroom. The study seeks to answer the following two main research questions: (1). How teachers' facilitate learning for learners with disabilities in inclusive classroom? (2). what is the effect of using 'Teachers for All' DVD materials for teachers in influencing teacher-learner interaction, and learner-learner interaction in inclusive classroom?

The study was carried out in two selected primary schools situated in Songea Municipality, in Tanzania. Four teachers were purposeful selected as participant of the study. Each of the teachers selected in the study was treated as a case. Qualitative case study design was used in the study. Data had been collected through interview and observation methods. 'Teachers for All' DVD materials were used for intervention to the selected teachers (case) in the study.

The findings of the study show that teachers' facilitation of learning to learners with disabilities in inclusive classroom was good for three teachers. The findings obtained from the forth teacher was not good. The use of 'Teachers for All' DVD materials in the study had brought very encouraging positive results. It led for teachers to improve their facilitation of learning to learners with disabilities in their classroom. Various strategies and techniques had been employed by teachers than the previous findings obtained before intervention. Teachers became more confident; made a mult-use of teaching strategies in involving, encouraging, motivating, eliciting responses, and make learners participate and interact with them. After intervention, the teacher-learner interaction, and learner-learner interaction increased and was more improved. It may be possible that, the materials had stimulated, imparted and shed a new light for teachers' understanding of how to manage and teach learners with disabilities in inclusive classroom.

Based on the findings, the study concludes with some few recommendations, it includes giving in-service training for teachers, introducing special needs education course (basic introductory courses) for student teachers in teachers colleges, developing and designing flexible curriculum content, provision of adequate teaching and learning resources, and arrangements for seminars and short courses about special needs education for in-service teachers who teach in inclusive classroom without getting basic training in special needs education.

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DEDICATION

I dedicate this thesis to my wife

Marietha P. Mushi

TABLE OF CONTENTS

ABSTRACT	II
ACKNOWLEDGMENT	III
DEDICATION	IV
TABLE OF CONTENTS	V
CHAPTER ONE: INTRODUCTION	1
1.1 INTRODUCTION.....	1
1.2 BACKGROUND OF THE STUDY	1
1.3 RESEARCH OBJECTIVES	2
1.4 RESEARCH QUESTIONS.....	2
1.5 SIGNIFICANCE OF THE STUDY	3
1.6 OPERATIONALISATION OF TERMS	3
1.6.1 DISABILITY.....	3
1.6.2 INCLUSIVE CLASSROOM.....	3
1.6.3 TEACHERS FOR ALL DVD MATERIAL.....	4
1.7 THE STRUCTURE OF THE THESIS	4
CHAPTER TWO: REVIEW OF RELEVANT LITERATURE	5
2.1 INTRODUCTION.....	5
2.2 INTERNATIONAL DECLARATIONS	5
2.2.1 THE STANDARD RULES ON THE EQUALIZATION OF OPPORTUNITIES FOR PERSONS WITH DISABILITIES	5
2.2.2 THE SALAMANCA STATEMENT AND FRAMEWORK FOR ACTION	6
2.2.3 THE DAKAR FRAMEWORK FOR ACTION	7
2.3 INTERACTIVE TEACHING AND LEARNING.....	8
2.3.1 LEARNING	8
2.3.2 INTERACTIVE TEACHING	9
2.3.3 FEATURES OF INCLUSIVE CLASSROOM.....	9
2.3.4 INTERACTIVE TEACHING AND LEARNING IN THE CLASSROOM	9
CHAPTER THREE: RESEACH METHODOLOGY	13
3.1 INTRODUCTION.....	13

3.2 RESEARCH DESIGN	13
3.2.1 INTERVENTION FOR TEACHERS WITH THE USE OF TEACHERS FOR ALL DVD MATERIALS	13
3.2.2 PILOT STUDY	14
3.3 GETTING ACCESS TO THE FIELD	14
3.3.1 OBTAINING PERMISSION	14
3.3.2 VISITS TO SCHOOLS	15
3.3.3 CONTACTS WITH TEACHERS	15
3.4 SAMPLING	15
3.4.1 THE CASE SELECTION	15
3.4.2 THE SCHOOL SELECTION	15
3.4.3 THE CLASSROOM SELECTION	16
3.5 METHOD OF DATA COLLECTION	18
3.5.1 INTERVIEWS	18
3.5.2 RECORDING THE INTERVIEW DATA	18
3.5.3 OBSERVATIONS	19
3.5.3 RECORDING THE OBSERVATION DATA	20
3.6 DATA ANALYSIS	20
3.7 VALIDITY AND RELIABILITY	21
3.8 ETHICAL CONSIDERATIONS	21
CHAPTER FOUR: RESEARCH FINDINGS	23
4.1 INTRODUCTION.....	23
4.2 FINDINGS PRESENTATION	23
4.2.1 TEACHER AMINA.....	23
4.2.2 TEACHER BARNABAS.....	30
4.2.3 TEACHER VICKY.....	37
4.2.4 TEACHER SARAH.....	40
4.3 SUMMARY OF THE FINDINGS.....	43
4.3.1 AMINA	43
4.3.2 BARNABAS	47
4.3.3 VICKY	50
4.3.4 SARAH	52
CHAPTER FIVE: DISCUSSION, CONCLUSION, AND RECOMMENDATIONS.	54

5.1 INTRODUCTION.....	54
5.2 DISCUSSION	54
5.2.1 TEACHER AMINA.....	54
5.2.2 TEACHER BARNABAS.....	57
5.2.3 TEACHER VICKY	60
5.2.4 TEACHER SARAH.....	62
5.2.5 THE TEACHERS' OPINIONS TO IMPROVE FACILITATION OF LEARNING FOR LEARNERS WITH DISABILITIES IN INCLUSIVE CLASSROOM	64
5.3 CONCLUSION.....	65
5.4 RECOMMENDATION	66
REFERENCES	68
APPENDIX 1: INTRODUCTORY LETTER.....	71
APPENDIX 2: A RESEARCH CLEARANCE.....	72
APPENDIX 3: RESEARCH INSTRUMENTS-INTERVIEW GUIDE.....	73

CHAPTER ONE: INTRODUCTION

1.1 INTRODUCTION

The study examined how four teachers facilitate learning to learners with disabilities in inclusive classroom in two different purposeful selected primary schools. The study was conducted in two classes for each school. It involved standard two and, standard three for one school and, standard three and, standard five in another school. It also examined various challenges encountered by teachers during facilitation. In addition, it examined and described the effect of using ‘Teachers for All’ DVD material in influencing teacher-learner interaction, and learner-learner interaction in inclusive classroom. This study was carried out in Songea Municipality, in Tanzania.

1.2 BACKGROUND OF THE STUDY

Teaching for learners with disabilities is not well developed in the education system of Tanzania. In improving inclusive education, it seems that there is a need to prepare a good ground for training more teachers in the field of Special Needs Education as a means to resolve the problem. Also there is a need of Curriculum shift from traditional teaching and assessment model which is now prevailing, to the teaching and assessment model where its purpose is neither to transfer knowledge, give marks nor to place learners in segregated environments. This is opposite in comparison to traditional teaching and assessment model where its objectives is to transfer knowledge, measure and give marks in comparisons with other learners in the classroom, school, and at regional or national level.

Many primary schools in Tanzania have shortage of teachers. The situation is worse in those schools which practice inclusion to learners with disabilities. These schools had shortage of trained teachers in the field of Special Needs Education. Shortage of professionals, special needs educators, as well as lack of teaching facilities and learning devices for the learners with disabilities are also the problems which draws back the efforts in providing good education to the learners with disabilities. In many schools the ratio of teacher: learner is very discouraging. The number of learners per class is big as a result teachers faced with many difficulties during facilitation. The government policy still emphasizes to increase the training of regular teachers rather than teachers in Special needs education. Teachers who teach in

inclusive classroom for learners with disabilities are still faced with many challenges. The act of managing to teach and involving learners with disabilities to participate and interacts with the teacher, and interacts among learners themselves during learning in their classrooms had been seen to be one of the challenge which faced many teachers.

1.3 RESEARCH OBJECTIVES

The objectives of this study were to examine how teachers facilitate learning by interacting with learners who had disabilities, as well as how they facilitate interaction among learners with and without disabilities in the classroom. It also examined various challenges encountered by teachers during facilitation. In addition, it examined and described the effect of using ‘Teachers for All’ DVD materials for some of the selected sequences in influencing teacher-learner interaction and, learner-learner interaction in inclusive classroom.

1.4 RESEARCH QUESTIONS

The phenomenon studied was teachers’ facilitation of learning for learners with disabilities in inclusive classroom. The study was guided by the following question:-

1. How teachers facilitate learning for learners with disabilities in inclusive classroom?

Sub-Questions

- (a) How teachers facilitate learning by interacting with learners who have disabilities in inclusive classroom?
 - (b) How teachers’ facilitate learner-learner interaction in inclusive classroom?
 - (c) What challenges do teachers encounter in facilitating learning for learners with disabilities in inclusive classroom?
2. What is the effect of using ‘Teachers for All’ DVD materials for teachers in influencing teacher-learner interaction, and learner-learner interaction in inclusive classroom?

1.5 SIGNIFICANCE OF THE STUDY

The intention of this study is to be useful for teachers, student-teachers (teacher trainee), curriculum developers, policy makers, and the Ministry of Education and other stake holders in education to understand more about teaching and learning for learners with disabilities as how it should be planned, organised, facilitated and, taught.

Further, it may show how teachers facilitate learning by interacting with learners who had disabilities and interaction among learners themselves in inclusive classroom hence giving a new knowledge and skills for teachers. The study may help to think on possibility of introducing some core basic courses about special needs education for all teachers colleges to enable the student-teachers (teacher trainee) to acquire adequate theoretical knowledge, skills, practical teaching strategies and methods of teaching hence making an improvement in facilitating learning for learners with disabilities in inclusive classroom.

1.6 OPERATIONALISATION OF TERMS

1.6.1 DISABILITY

Disability refer to the loss or limitation of opportunities to take part in the normal life of the community on an equal level with others due to physical, mental or social factors (GoURT,2004). The International Classification of Functioning, Disability and Health (ICF) argued that disability is an umbrella term, covering impairments, activity limitations, and participation restrictions. Impairment is a problem in body function or structure; an activity limitation is a difficulty encountered by an individual in executing a task or action; while a participation restriction is a problem experienced by an individual in involvement in life situations. Thus disability is a complex phenomenon, reflecting an interaction between features of a person's body and features of the society in which he or she lives (WHO, 2002).

1.6.2 INCLUSIVE CLASSROOM

Inclusion in the context of education is the practice, in which learners with special educational needs spend most or all of their time with non – disabled learners. A classroom is a room in which teaching or learning activities can take place. Inclusion rejects the use of special schools or classroom to separate learners with disabilities from learners without disabilities.

1.6.3 TEACHERS FOR ALL DVD MATERIAL

These are the educational materials/educational media produced with an intention of contributing to the teachers' understanding of how to manage inclusive classroom and teach learners with disabilities. The material has been worked out in the Department of Special Needs Education in collaboration with the Intermedia Department, Faculty of Education, at University of Oslo – Norway. The material has a focus on teacher education for inclusion and on how to improve teachers' competence in teaching learners with disabilities or special educational needs in inclusive classroom.

1.7 THE STRUCTURE OF THE THESIS

The study had been divided into five chapters beginning with an introduction, followed by a review of relevant literature, description of the methodology, reporting the findings of the study, and discussion, conclusion and recommendations.

CHAPTER TWO: REVIEW OF RELEVANT LITERATURE

2.1 INTRODUCTION

The study is grounded on the theories of learning as expounded by Vygotsky (1978) and Bruner (1986) and other literature which grow out of it explaining about the importance of talk in developing thinking and learning. This chapter begins with the voice of International Declarations which talks about the provision and, the importance of education for persons with disabilities. Secondly, the library searched and reviewed relevant literature had been presented and discussed.

2.2 INTERNATIONAL DECLARATIONS

International bodies, governments, and organizations have come to realize the importance of education of each and every child irrespective of their needs and disabilities. The World Conference on Education for All (EFA) in Jomtien in 1990 talked about getting all children to school and giving them good education. Although practically it did not involve children with disabilities, in 1993 The Standard Rules on the Equalization of Opportunities for Persons with Disabilities come with the great hope for future of persons with disabilities.

In 1994, the Salamanca Statement on Inclusive education called for the education of each and every child irrespective of their disability to be included in schools and emphasized on considerations to be made to the learners regarding to their individual educational needs (UNESCO, 1994). The Dakar Framework for Action insisted on matters related to education of good quality especially to the most vulnerable and disadvantaged children.

2.2.1 THE STANDARD RULES ON THE EQUALIZATION OF OPPORTUNITIES FOR PERSONS WITH DISABILITIES

The term ‘Equalization of Opportunities’ as used hereby implied a process through which the various systems of society and the environment, such as services, activities, information and documentation are made available to all, particularly to persons with disabilities. The Standard Rules on the Equalization of Opportunities for Persons with Disabilities emphasized

the States to take an action of the following for the recognition of people with disabilities:- (i) States had been emphasized to recognize the principle of equal primary, secondary and, tertiary educational opportunities for children, (ii) Special attention should be given to very young children with disabilities, pre-school children with disabilities, and to the adults with disabilities particularly women.

The Standard Rules on Equalization of Opportunities for Persons with Disabilities still emphasize on the importance of the States to accommodate educational provisions for persons with disabilities. It insisted that States should have clearly stated policy, understood and accepted at the school level and by the wider community. Further it added that States should allow the curriculum flexibility, addition and adaptation. Last but not least, it mentions on the role of the State to provide for quality materials and, ongoing teachers training program and support teachers.

As a conclusive remark, The Standard Rules on the Equalization of Opportunities for Persons with Disabilities adhere that in situations where the general education system does not adequately meet the needs of all people with disabilities, then Special Education may be considered as a solution. The quality of such education should reflect the same standards, goals and, ambitions like a general education and, it should be closely linked to it.

2.2.2 THE SALAMANCA STATEMENT AND FRAMEWORK FOR ACTION

The Salamanca Statement was the outcome of the Framework for Action on Special Needs Education that was adopted by the World Conference on Special Needs Education organized by the government of Spain in co-operation with UNESCO. The Conference was held in Salamanca in June, 1994. It addressed that Special Needs Education incorporates the proven principles of sound pedagogy from which all children may benefit. It assumes that human differences are normal and, learning must accordingly be adapted to the needs of the child rather than the fitted to the preordained assumptions regarding the pace and, nature of the learning process. Child centered pedagogy had been emphasized and, seen to be beneficial to all students and, as consequence, to society as whole.

The Statement (UNESCO, 1994) proclaimed that: - (i) every child has a fundamental right to education and, must be given the opportunity to achieve and maintain an acceptable level of

learning, (ii) every child has unique characteristics, interests, abilities and learning needs, (iii) education systems should be designed and, education programs implemented and take into account the wide diversity of these characteristics and needs and, (iv) regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all. Moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system.

Generally, the Salamanca Statement proposed several areas which are needed to work in mutual cooperation. It mentioned the needs for the States to develop inclusive schools that cater for a wide range of learners in both urban and rural areas. Forceful policy on inclusion together with adequate financial provision – effective public information effort to combat prejudice and create informed and positive attitudes, an extensive programs of orientation and staff training, as well as the provision of necessary support services are crucial factors which needs States to give more weight so as to promote higher levels of learning achievement by all learners.

Attention had also been made to the changes in the aspects of schooling, as well as many others, as are necessary to contribute to the success of inclusive schools: curriculum, buildings, school organization, pedagogy, assessment, and staffing, school ethos and extra-curricular activities.

2.2.3 THE DAKAR FRAMEWORK FOR ACTION

The Dakar Framework and Millennium Development Goals were much concerned about the expansion and improvement of early childhood care and education, especially for the most disadvantaged children. It also aimed to ensure that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities have access to complete free and compulsory primary education of good quality, as well as improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and, essential life skills.

It is grounded from the World Declaration on Education for All (EFA) which takes a note on the poor quality of education, hence brought the needs to be improved, and made

recommendations on education to be universal and relevant. In 1990, achieving the fundamental goal of equity was given more priority while the notion of quality was not fully developed. This situation had led to another meeting in Education for All in Dakar, a decade later after previous meeting of 1990.

Thus the Dakar Framework for Action declared the accessibility to quality education and makes education a right to every child. It affirmed that quality should be the 'heart of education' and this should be the fundamental determinant of enrolment, retention and achievement. With the quality of education, it set out the desirable characteristics of learners such as healthy and motivated learners while on the other side, it insisted on teachers to use active pedagogies. The content (relevant curriculum) and the systems (good governance and equitable resources allocation) had also been mentioned and discussed.

2.3 INTERACTIVE TEACHING AND LEARNING

2.3.1 LEARNING

The term learning as used in Psychology and in education perspectives implies a process which brings together cognitive, emotional and, environmental influences and experiences for acquiring, enhancing, or making changes in ones' knowledge, skills, values and world views. Vygotskian learning theories provide the basis for the recognition that: classroom talk is both medium of teaching and learning, linking experiences and values brought to the classroom with new concepts experienced in school (Edwards and Mercer, 1987).

The socio-cultural theory of learning on its philosophical outlook pays an attention to specific social, cultural, and historical aspects of development. An emphasis on the theory is placed on the relationships between people, contexts, actions, meanings, communities and cultural histories (Wertsch et al, 1995). According to the theory, it recognise that cognition is not an individual construction; rather it is a collaborative process which is intrinsically related to participation and interaction with others in socio-culturally relevant activities such as inclusive classroom where learners with disabilities may learn and discuss various matters on different subjects for their academic achievement and development.

2.3.2 INTERACTIVE TEACHING

Interactive teaching refers to a teaching method which involves facilitator/teacher and learners in the classroom. It is a method which encourages and expects learners to participate. It uses oral questions to stimulate discussion, emphasizing the value of answers, gives participants hands-on experiences and, uses teaching aids to gain and retain attention. In other words, it is a range of differing levels of communication from simple participation in a discourse to exchanges between participants of a more extensive nature, to a learning process involving co-construction of knowledge in a collaborative community (Wells, 1999).

2.3.3 FEATURES OF INCLUSIVE CLASSROOM

Mittler and Mittler (1999:2-3) outline features one would find in a classroom or school with good inclusive education practice as: (i) all teachers accept responsibility for learning for learners, (ii) a restructured curriculum and pedagogy that ensures access and success for the whole range of children in its community, (iii) all children without exception attend ordinary classrooms in their neighbourhood schools and, (iv) the support provided for learners and teachers is planned in an unobtrusive manner.

A classroom or school can only claim to be inclusive when it has accepted the diversity of all learners as a part of the class and school as a whole, and when the individual needs of all learners begin to be met. Ainscow (1996) suggested that in an inclusive classroom: - (i) much of the teachers' time is used in observing, facilitating and praising children's effort. Helping children to find meaning in their experience, (ii) children are encouraged to collaborate in supporting one another, (iii) children are given a large degree of independence to shape their programs of activities during the school day and, (iv) children are expected to monitor their own work and reflect upon the meaning of their experiences and to keep record of their achievement.

2.3.4 INTERACTIVE TEACHING AND LEARNING IN THE CLASSROOM

Education in its most fundamental form is an interaction among the teacher, learner and, the subject content. In teaching and learning, an interaction should be in a continuum way whereby all educational transactions occur with teacher – learner at one end, and learner –

content interaction at the other point (Stewart, 1982). Interactive teaching is a key to effective learning and information exchange. Many learners value timely feedback concerning course assignments, examinations and projects. This helps them to gauge their progress and make meaningful changes in performance. The learners' avoidance of teacher – learner interaction may leads to a poor academic achievement.

There are three kinds of interaction during teaching and learning: - (i) learner-content, (ii) teacher-learner and, learner-learner interaction. Learner-content is the process of intellectually interacting with content to bring about changes in the learners' understanding, perspective, or cognitive structures. Teacher-learner interaction attempts to motivate and stimulate the learner and allows for clarification of misunderstanding by the learner with the content. Learner-learner interaction occurs between one learner and another learner or in group settings, with or without real-time presence of the teacher (Moore, 1989).

The quality of interaction between the teacher and learner in the classroom has been found to be the most important factor in improving the efficiency of the lesson taught (Offir, 1999, Oliver and Mc Loughlin, 1996). The use of interactive teaching and learning in the classroom based on the premise that virtually all learners can and, will develop the skills necessary to succeed well in the classroom under appropriate instructional condition. If interactive teaching method is well planned and organized, many learners may master clearly the specified objectives of the lesson before proceeding to more advanced work. Interactive teaching and learning is normally facilitated by the teacher through the use of oral question to stimulate discussion, emphasizing the value of answers, give participants hands-on experience, using teaching aids to gain and retain attention and, frequent monitoring of all learners in the classroom so as to assess their comprehension of the material as it is presented (Cummings, et al, 1982).

“Learners with developmental impairment need concrete learning materials and circumstances. First and foremost, they need guidance in the direction of more abstract to general cognitive function” (Lev Vygotsky as cited by Johnsen, 2001). Grasping of knowledge for learners depends on good teaching method and strategies used by the teacher in facilitating learning and good organization, and management of the classroom. The flexibility of the teacher in multiple uses of teaching methods and approaches such as breaking down learning task in to small tasks may help to meet different educational needs of learners (Johnsen, 2001).

In teaching learners with disabilities in inclusive classroom, the teacher-learner interaction can be applied in the following ways:- (i) teacher to demonstrate positive feelings to learners, (ii) teacher talk with learners, (iii) teacher to give relevant praise and acknowledgement learners, (iv) teacher to help learners to focus attention, (v) teacher to assists in giving meaning to the learners experiences, (vi) teacher to elaborate and explain,(vii) teacher to adapt to the learners and, (viii) teacher to help learners to achieve self discipline (Rye, 2001). The socio-cultural theory of learning view the curriculum developers having a significant role to play in helping the teacher to meet the objective of learning by interacting with learners in the classroom. It suggests that, the teacher should have a collaborative task of guiding and directing the learners' activities. Learners should learn by solving problems with the help of the teacher who models the processes for them. The curriculum developers should design the learning objectives at macro level in such a way that will make the teacher not to control the classroom with strictly rules and structure instead, he or she should collaborate with the learners and provide support and directions. Also the teacher should be careful in grouping the learners in such a way that can potentially develop collaboration among learners themselves and with a more capable person.

The use of interactive teaching and the role of the teacher are centrally important in scaffolding learners' use of language and visual representation. The strategies like leading questions, hints, and discussing representation may help in achieving the goal and objectives. Always the teacher had to maintain an active role in the classroom dialogue by creating atmosphere which will encourage the learners to participate effectively in formulating answers and solving apparent contradictions. Also as competences grow, the teacher should withdraw support and encourages learners to self-regulate their activities (Rogoff, 1990).

Lev Vygotsky used the concept of *Zone of proximal development*. It posits that human potential is theoretically limitless, but the potential limits of human depend upon a quality of social interactions and residential environment. The concept as used by Vygotsky appeared to focus more on the type of interaction familiar to schooling and academic learning. His perspective seems to insist on the ideal role of the teacher in providing scaffolding (collaborative dialogue) as a means to assists learners on tasks within their zone of proximal development. The teacher responsibility should be that of building interests and, then to engage the learners. The teacher needs to keep learners' focused while concentrating on the most important theme, ideas or assignment.

Socio-cultural theory of learning emphasizes the importance of recognizing the fact that learners learn much through interaction. It also addresses the importance of social interaction and the use of language as two primary means in the whole process of learning. It emphasizes that language greatly enhances humans' ability to engage in social interactions and share experiences. For example, at the initial stage, learners' new knowledge is interpsychological. This means that it is learned through interaction with others on the social level such as parents, siblings, caregivers, peers and other relatives. Later, the same knowledge becomes intrapsychological: meaning inside the learner and new knowledge or skills is mastered on an individual level. Therefore, social interaction and language are very significant for learners to learn in acquiring skills, values and knowledge in the school, and in his or her society where the learner is learning or living.

It is estimated that teachers use curriculum and spend more than sixty percent in making statements, and less than twenty percent in asking questions, possibly suggesting a non-interactive and indeed quite transmissive teaching (Galton et al. 1999). In the classroom where the teacher uses an interactive teaching method, usually there is a high quality of dialogue between the teacher and learners. In the classroom, the teacher may use different ways to facilitate interactions. This may include posing oral questions, group problem-solving activities, learners' presentations and, role-play exercises (Moore and Kearsley, 1996).

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter describes the design, methods and procedures which had been used in the study.

3.2 RESEARCH DESIGN

In order to have in-depth understanding on the knowledge on how teachers' facilitate learning to learners with disability in inclusive classroom, the use of qualitative case study was seen to be a good approach in answering the research questions studied. Also the approach had been chosen with intention to provide a deep insight into the phenomenon and make a room for providing a possible description and explanation of the findings of the study.

Case study research is in-depth study of one or more instances of a phenomenon in its real life context that reflects the perspectives of the participants involved in the phenomenon. A case is a particular instance of a phenomenon of interest to the researcher. A case study is done to shed light on a phenomenon, which is a process, event, person, or other item of interest to the researcher. A phenomenon is an entity or real thing being studied such as programs, curricula, roles, and events (Gall, Gall and Borg, 2007). In this study, the instances studied were four primary school teachers and, the phenomenon studied was facilitation of learning for learners with disabilities. The context of the study was inclusive classroom.

3.2.1 INTERVENTION FOR TEACHERS WITH THE USE OF TEACHERS FOR ALL DVD MATERIALS

Teachers who were involved in the study used the educational media materials called 'Teachers for All'. They saw how facilitation of learning to learners with disability in inclusive classroom is practiced. This was done in time after the first interview and observation. A small seminar for intervention was organized in one of the selected school. There were six teachers who participate in that seminar. Two teachers among them were not selected teachers in the study but they were interested to join in watching the material and share ideas and discussion together in relation to what they watched.

The exercise of data collection continues after watching the material. Every teacher who had been involved in the study was required to be observed in teaching and to be recorded two times. The observation for teachers after intervention was scheduled to take place one week after watching the material and, then to take a time rest for two weeks before the last observations to be made for every teacher.

The intervention with the material for teachers was aimed to see the effect of using ‘Teachers for All’ in influencing: - (i) teacher-learner interaction and, (ii) learner-learner interaction in the whole process of teaching and learning for learner with disabilities in inclusive classroom.

3.2.2 PILOT STUDY

A pilot study was planned and it was conducted before the exercise of data collection to commence. It had an intention of gaining an insight into the process and testing the instruments to be used in data collection.

3.3 GETTING ACCESS TO THE FIELD

3.3.1 OBTAINING PERMISSION

The proposal to carry out the study was approved by the Department of Special Needs Education, Faculty of Education, at University of Oslo. This resulted to the provision of introductory letter from the University of Oslo to the relevant authorities in Tanzania where the study was carried out.

In accordance to the rules, a letter for application to carry out the study in schools was written to the Permanent Secretary of the Ministry of Education and Vocational Training in Tanzania. The letter of application was attached with an introductory letter from University of Oslo (see appendix, 1) and a copy of a research proposal. The permission to carry out the study was granted by the Permanent Secretary of the Ministry of education and vocational Training in Tanzania (see appendix, 2).

3.3.2 VISITS TO SCHOOLS

The study visits was made to some schools situated in Songea Municipality, Tanzania. The objective of the visits was to meet with the Head teachers and to explain to them the reason and purpose of the visits, and seek their permission and collaboration in identifying teachers who will take part in the study. It also helped in identifying the classroom of learners with disabilities or special educational needs. The visits provided an opportunity to meet with teachers who agree to take part as participants of the study.

3.3.3 CONTACTS WITH TEACHERS

Teachers were contacted mostly during regular school working hours. Communication with teachers was done by visiting them in schools or through mobile phones where it was necessary to do so. This was done mostly in scheduling time either for interview, observations in the classroom or information to postpone an exercise due to some inconveniences faced the participants.

3.4 SAMPLING

A purposeful selection was used to select teachers who participated in the study. The purpose of selecting the case or cases is to develop a deeper understanding of the phenomenon being studied (...). In purposeful sampling the goal is to select cases that are likely to be information rich with respect to the study (Gall, Gall and Borg, 2007).

3.4.1 THE CASE SELECTION

Four teachers were selected from two different primary schools. Each school provided two teachers. In one school, the participants had attended a course in Special Needs education while the other two participants in another school did not attend any training program, course or seminar about Special Needs education. All four teachers had been given pseudo names.

3.4.2 THE SCHOOL SELECTION

The study was aimed to be carried out in two inclusive primary schools. Thus, two inclusive primary schools were selected for the study. Although those two schools were called

‘inclusive school’ but in reality each school selected (Kilimani Primary School), had been specialized in a certain type of disability in recruiting her learners. The first school selected had been specialized in recruiting learners with, and without visual impairment. In the beginning of the school (standard one to standard two), the learners with visual impairment study separately in the special unit found in the school. This aimed to make them acquiring skills in reading and writing in Braille. At standard three, they start to mix up with their peers without visual impairment in regular classroom until they finish their education in standard seven.

The second school selected (Mtakuja Primary School), was specialized in recruiting learners with and without mental retardation. In this school, the learner who is mentally retarded starts his/her education in a special unit found within the school. Good progress of the learner in a special unit may lead the learner to be registered in a regular classroom to start standard one with his/her peers who are without mental retardation until finishing his/her education in standard seven. Those two selected schools had been given pseudo names.

3.4.3 THE CLASSROOM SELECTION

In each school selected, two classes were chosen for the study. The selection of the class was determined by the presence of the learner(s) with disability, and willingness of the teacher to participate in the study. The other factor was the standard/level of the class. This was due to the fact that teachers who teaches in Standard four and seven classes, and the learners in these classes were exempted from the selection in the study due to preparation of their national examinations which was near to commence.

Thus the standard three and five were selected in the school for learners with and without visual impairment (Kilimani Pr. School), and standard two and three were selected in the school for learners with and without mental retardation (Mtakuja Pr.School). The learners who had been focused during facilitation (learners with disabilities) were given anonymous names. The following tables show the selection of the classes and the number of learners with and without disability in each school, and each class selected for the study.

TABLE 1: KILIMANI PRIMARY SCHOOL

Standard	Number of pupils per class	Pupils with disability per class	Female	Male
III	38	2	-	2
V	35	2	-	2

TABLE 2: MTAKUJA PRIMARY SCHOOL

Standard	Number of pupils per class	Pupils with disability per class	Female	Male
II	32	2	-	2
III	56	1	-	1

3.5 METHOD OF DATA COLLECTION

The interviews and observations were employed as the methods of data collection in the study.

3.5.1 INTERVIEWS

Interview consists of oral questions asked by the interviewer and oral responses by the research participants. In most cases, it involves one respondent at a time, but in other situation group interview can also be conducted. The main advantage of using interview method in collecting data is its adaptability. It may enable the interviewer to make an effort to build a trust and rapport with respondents, thus making it possible to obtain information that the individual probably would not reveal by any other data-collection method. Interview can also enable the researcher to make follow up on a respondent's answers to obtain more information and clarify vague statements (Gall, Gall and Borg, 2007). The purpose of interview is to obtain description of the lived world of the interviewees with respect to the interpretations of the meaning of the described phenomenon (Kvale, 2004).

Interview was carried out to every teacher selected to participate in the study. The interview guide was developed and used (See appendix 3). The time arranged for an interview was approximately 45 minutes for every teacher. The interview questions were formulated on the basis of the main research questions and sub-questions. There were four identified themes in the interview questions as derived from the main research questions. These included the following: (i) knowledge of the teacher about inclusive education, (ii) facilitation of learning in inclusive classroom through using interactive teaching methods, (iii) the challenges faced teachers during facilitation of learning in inclusive classroom through using interactive teaching methods and (iv) teachers opinions about facilitation of learning in inclusive classroom through using interactive teaching methods.

3.5.2 RECORDING THE INTERVIEW DATA

The interview data were recorded by using digital voice recorder and this was considered to be more appropriate. It reduced the possibility of being biased in the selection of data because digital voice recorder captured all information interviewed from teachers. The use of audio recorders reduces the tendency of interviewers to make an unconscious selection of data

favoring their biases. The audio recording provides a complete verbal record, and it can be studied much more thoroughly, and it speeds up the interview process (Gall, Gall and Borg, 2007).

3.5.3 OBSERVATIONS

Observation is a method of data collection where a researcher observes directly the behavior and the social and physical environment of the individuals being studied. If it is used properly, observational methods avoid the potential inaccuracy and bias of data generated by research participants. Observation allows researchers to formulate their own version of what is occurring and then check it with the participants. The inclusion of selected observations in a researcher's report provides a more complete description of phenomena than would be possible by just referring to interview statements or documents. It provides an important additional source of data for verifying the information obtained by other methods. One of the limitations of observation method is that it is more time-consuming (Gall, Gall and Borg, 2007).

The study used non participant observation approach. The classroom observation was carried out during the school teaching regular hours. In observation, an attention was focused on (i) teacher-learner interaction, (ii) learner-learner interaction and, (iii) the challenges encountered teachers during facilitation for learners with disabilities. These three themes were studied in the classroom by observing the teacher behavior in facilitating learning to the learners with disabilities in his/her class, as well observing the learners behavior in learning by interacting among themselves during learning. To meet the objectives of the study, the following aspects were observed. It includes the action of the teacher to: ask learners for clarification, ask individual learner a question, ask question to the class as whole, give a chance to the learner to contribute her/his ideas, ask the learner if has understood/ or if she/he has a question, chose the learner to go to the chalkboard to solve a problem or demonstrate or role-play exercise, calling frequently to elicit the learner response, encourage the learner to elaborate their answer, talk and help the learner who has difficulties in learning, award the learner a relevant praise and acknowledgement(motivation), make the learner focus attention, punishing indiscipline learners, ask for quiet, assists the learner in giving meaning to his/her learning experience, giving time the learner think before to respond to question asked and, facilitate talks in learner-learner or talks in small group discussion.

On the other hands, learners with disabilities were observed in the following actions. It include action to: raise their hands in order to be called on, ask question to the teacher, explain his/her answer, talks between learner-learner or talks in groups and, respond to the several questions asked by the teacher. The above observed aspects in the study had been generated from the relevant literature studied about interactive teaching and learning in the classroom and, also some have been identified from the ‘Teachers for All’ DVD materials about teachers understanding of how to manage inclusive classrooms and teach learners with disabilities.

3.5.3 RECORDING THE OBSERVATION DATA.

To ensure accurate recording, data were recorded by using video camera. The focus in observation were made to the teacher behavior/action towards the learner with disability and, behavior/action of the learner in interacting with his/her teacher, and interaction with his/her peers during learning in the classroom. Also the challenges encountered by the teacher during facilitation of his/her lesson were recorded too. Since the frequency-counting recording was used, the observer recorded each time a targeted behavior occurred from the data recorded by camera. A tally sheet-observation form was developed and used for this purpose.

3.6 DATA ANALYSIS

Data analysis is the process of simplifying data in order to make it comprehensible. Qualitative analysis is difficult, complex, and lengthy and time consuming (Morse, 1994). Each interview and observation data collected were transcribed. In interview, transcription was done by listening to the voice recorder. Each and every word spoken by the teacher was written down. The listening and writing process was done careful in order to avoid the possibility of leaving out some vital and important information.

The observation data had been transcribed by observing and writing down every teacher behavior/actions in facilitating learning to learner(s) with disability. It was also transcribed by observing and writing down the behavior/action of the learner(s) with disability in interacting with his/her peers without disability. This was done by closely looking to the video recorded in the classroom. The video was watched as many times as possible to crosscheck if there were any useful information/ unnoticed behavior left out.

3.7 VALIDITY AND RELIABILITY

Validity as a concept refers to the extent to which the research uses methods and procedures that ensure a high degree of research quality and rigor. It investigates what it intends to investigate. This is to explain if the findings are meaningful, relevant, and true to the research questions (Gall, Gall and Borg, 2007).

Reliability is defined as the extent to which other researchers would arrive at similar results if they studied the same case using exactly the same procedures as the first researcher. It is the degree of consistency of the results through the use of data collecting instruments, checked and controlled, undistorted by personal bias and prejudice. In other words, it is the ability of a tool to consistently measure the phenomenon it is designed to measure (Gall, Gall and Borg, 2007). Yin (1994) holds the view that the goal of reliability is to minimize error and bias in a study.

The study made an account on all issues related to validity and reliability. During the preparation of the interview guide which was used in the study, my supervisor got a chance to read and comment on it. This helped to crosscheck the relevance of the questions in interview guide in relation to the phenomenon studied. A pilot study was carried out with two teachers who were not participant of the study to see if the questions were okay, useful and easily comprehensive to the interviewees. A pilot study also was aimed to test the devices used in audio-recording for interviewee, video camera for observation records, as well as gain experience and confidence in the field.

3.8 ETHICAL CONSIDERATIONS

Every researcher needs to consider carefully before-before, during, and after the conduct of a research study the ethical concerns that can affect their research participants. By understanding and addressing such ethical concerns, some of which are embedded in governmental regulations, educational researchers show respect for research participants, protect them from avoidable harm, and honor their contributions to research knowledge (Gall, Gall and Borg, 2007). Robson (1993) holds the view that a research should ensure that relevant persons and authorities are consulted and informed. With this view, the study was granted permission from the Department of Special Needs education, Faculty of Education at University of Oslo by allowing the study to be carried on. Further it got the permission from

the Ministry of Education and Vocational Training in Tanzania where the study was carried out.

Head teachers and the selected teachers (participants) were consulted and their consent was obtained. This was done through the school visits where the objectives of the study and the procedures to be followed were explained to them. The issue of confidentiality on the information obtained from them and the use of pseudo names in the findings was explained and well assured to them. This helped to build a trustful relationship to those teachers who participated in the study. They further accepted the methods which were used to collect the data from them. They did not have any doubt with the use of either voice recorder in interview or Camera for video recording in the classroom.

CHAPTER FOUR: RESEARCH FINDINGS

4.1 INTRODUCTION

In this chapter, the research findings are presented. The objectives of the study were to examine how teachers facilitate learning for learners who had disabilities in inclusive classroom. It also examined various challenges encountered by teachers during facilitation. In addition, it examined the effect of using 'Teachers for All' DVD material in influencing teacher-learner interaction in inclusive classroom.

The study was carried out with four selected teachers who teach in primary schools. The presentation starts with the interview findings. Next to this, observation findings would be presented. The findings in observation had been divided into two main parts: (i) the findings obtained before the intervention to the cases, and (ii) the findings obtained after the intervention made to the cases.

The findings obtained after the intervention is further divided into two parts: (a) the findings obtained after making classroom observation one week after the intervention, and (b) the results obtained after passing two weeks (time rest) after the observation made in one week after the intervention. Hereby the findings had been presented separately for each and every teacher who had been selected and participated.

4.2 FINDINGS PRESENTATION

4.2.1 TEACHER AMINA

Amina had a Certificate in teacher education-Grade IIIA. She is trained teacher. In addition, she had a Certificate in Special needs education after attending a course at Patandi teachers college for one year. She had eight (8) years of teaching experience, including one year teaching in inclusive classroom for learners with and without visual impairment.

INTERVIEW FINDINGS

Knowledge about Inclusive education

Amina acknowledge the fact that she has learned, and heard about inclusive education in some few years ago. She said that “inclusive education is a type of education which is provided to all learners in the school or classroom regardless of the type of disability in which the learner may have. All learners are given equal opportunity to learn” (Amina). She said that in their school, it is seldom for teachers discussing matters relating to inclusion for learners with disabilities, although their school is known and called as inclusive school.

Facilitation of learning in the classroom

Creativeness of the teacher in using multi-teaching methods in the classroom was among of the teaching strategies mentioned to be used by the teacher. She said: “involving learners who had visual impairment in inclusive classroom, needs the teacher to be creative enough in using different teaching methods which will make all learners to participate during teaching and learning” (Amina). Also she said that sometimes it happens that the teacher may take a lot of time to spell out difficult words to the learner with visual impairment, while at the same time it requires them to write in the blackboard for learners without disabilities. Therefore it appeared to be very challenging to them.

The use of teaching aids. She mentioned the importance of using teaching aids by the teacher during teaching in the classroom for learners with and without visual impairment. She said that: “to facilitate interaction between the teacher and learners with visual impairment. The use of teaching aids is inevitable. It helps more these learners to understand on what is taught (...). The use of teaching aids like natural things may make learners with visual impairment to touch it and get feelings of its nature on how it looks likes, while learners without visual impairment may see the picture or diagrams drawn for them. For example, when you teach about a knife, you may take it and show to learners without visual impairment, and then you take the same knife and tell the learner who is visual impaired to touch it and feel about it. This may help to promote more understanding about it and the subject matter which you’re teaching” (Amina).

Another method was the use of oral questions and answer method. To enhance facilitation of learning by interacting with the learners who had visual impairment, Amina use to ask oral questions to learners by standing near and looking them face to face. She said: “this is very good method of teaching as it helps to draw the learners’ attention and focus. Although they are not able to see me but this method help them to hear my sound clearly as I stand near to them. These learners are also using smell in learning things. Thus when am standing near to them, they feel my presence, and this may make them to think that soon the teacher may ask me a question or say something about me. To enhance interaction with them, I also emphasize them to look on the front. Although I know that they are not able to see anything, but this action helps them to catch up well my sound when I am emphasizing a particular thing during teaching” (Amina).

Challenges faced during facilitation of learning in the classroom

Amina pointed the fact that most of the time she is faced with the challenge of getting appropriate teaching and learning materials for learners with visual impairment in her classes which she is teaching. She said: “in our school, we have a problem of teaching materials and learning resources for learners with visual impairment. This include hardboard for drawings, color, manila sheet, wood and other resources like Perkins Braille in which learners are required to use. For example if I teach a lesson about birds such as hen, to draw its picture or diagram, it needs a lot of materials so as to make the learner with visual impairment to understand well like their peers without visual impairment. Now with the problem of lack of relevant teaching material and learning resources, it become very difficult sometimes to meet the objectives of the lesson especially to these learners with visual impairment” (Amina).

Opinion about facilitation of learning in inclusive classroom

Amina expressed her opinion in improving facilitation of learning to learners with disabilities in inclusive classroom by inquiring the curriculum developers to design, develop and suggest various teaching strategies, methods and activities in the syllabus in every topic so as it could help teachers to be well knowledgeable on using different ways and strategies to facilitate and improve learning to learners with disabilities.

PRE-INTERVENTION OBSERVATION FINDINGS

Sitting arrangement in the classroom

The classroom had one learner who had visual impairment. His name was called Juma. In the classroom there were three columns of desks arranged from the front to back of classroom. His desk was in the mid-column. Juma was observed seated next desk from the front line desks. There were two other learners (girls) seated with him. Juma seated in between those two girls. The classroom was seen to be big and have enough space. It had more than forty learners registered, but there were only 35 learners who attended to class almost in everyday.

Teacher-Learner interaction

Two times Amina was observed and seen to ask her learners to clarify their answers. Many times she did not ask learners to give clarification for their answers. She was observed to ask individual learner a question in five times. Once she said: “now we are entering in the job which I wanted you to do. Ok, which word in group B is matching with the first word ‘*theluji*’ (snow) in group A? Enheeeee..... who can try? Ok, Juma! Tell us! (Juma is a visually impaired learner- he stands up and answer it): barafu (ice)” then the teacher asked it again to Juma, yes good Juma, but tell us what is barafu? (Amina: Juma).

It has been observed that the teacher very rare asks the learners in her class if they had any question. Only one time she asked Juma if he has any question at the end of a lesson. She said: “Juma have you understood what we had learnt today? Do you have any question?” (Amina). And later the similar question asked to the whole class. Several times (it was more than six times) the teacher was observed to ask questions to the class as whole. But few chances were given for the learner with a visual impairment called Juma).

Only one time the teacher was observed to work closely, talk and helps the learner with visual impairment (Juma). This was similar observed to the teacher in encouraging the learner either to elaborate or encourage a response from him. Verbal praise as rewards from the teacher seldom was used. Only two times the teacher was observed to congratulate learners who did well in answering oral questions used to ask. One time it was for Juma, and the second time it was for Annette. She said: “Vizuri Sana” (Very good) (Amina).

In her class, Amina was observed six times calling for frequent learners response for the whole class, although in some times her target was to ensure that Juma is being involved and participate as other learners in the classroom. She said: “class, who can tell me which word in group B, match with the word ‘mstari’ (a line) from group A? Enheee... class try! Ok, Juma what is that word? Just try! Enheee...Juma! (Amina).

It was also observed that the teacher used a technique of mentioning the names of learners so as to make them focus attention. It was seen that, when Juma had been asked a question, the teacher tried to elicit a response from him. If Juma did not reply on a question asked, the teacher skips him and appointed another learner to answer it. To speak, the teacher was giving enough time Juma either to gather a thought on a question asked or to assists him in giving meaning to his learning experience.

On the other hands, the following were not seen to be done by the teacher: (i) to facilitate talks between learners in groups, (ii) to form small groups of learners for discussion in the classroom, (iii) to facilitate talks between learners, (iv) to disciplines/punish learners, (v) to ask for quiet to the learners, (vi) to send any learner in front or in the blackboard either to solve a problem, demonstrate things or role play exercise.

Also the following were not observed: (i) the learner to ask a question to the teacher, (ii) the learner to discuss in groups, and there were no groups that had been made and, (iii) the learner to initiate talks to another learner/neighbor in the classroom.

POST-INTERVENTION OBSERVATIONS FINDINGS

(i) The findings observed one week after intervention

Teacher-Learner interaction

It has been found that, Amina asked question three times to the learners as whole. She did never ask any question to Juma (the learner who is visually impaired). Since she was teaching dictation (a lesson planned in that day), the teacher was only reading from her book, and learners attentively and carefully listen to her and write down every word which they heard from the teacher reading. It was seen that Amina in most of her time stands near to Juma, and four times was seen to talk and help him in areas of difficult. For example, Amina repeats to

read as several times when Juma inquired the teacher to do so. Juma was writing by using his Braille machine.

More than five times Amina was seen to insist the learners to focus attention on what she was reading. She said: “class, listen to me careful when am reading. Ok, am repeating, listen please!”(Amina). This was observed as a technique/strategy employed by the teacher for the whole class and not intended only for Juma. Because Juma was using a Braille machine in writing a dictation, four times the teacher was noticed to assists him in spelling well some words in reading, and give him enough time to write or gather his thoughts before to write, and teacher take a pose for a while.

With this classroom observation, the following behaviour/action were not seen to be done by teacher: (i) ask the learner to make clarification(s), (ii) ask individual learner a question, (iii) send the learner in front/ chalkboard solve a problem or role play exercise, (iv) gave a chance the learner to contribute his ideas, (v) calling for frequent learner response, (vi) award the learner a praise or acknowledging, (vii) ask for a quiet or punishing learners due to misbehaviour and, (viii) to facilitate talks to learner-learner or in small groups formed in the classroom.

On the other hand, only one time Juma asked a question to the teacher. He wanted the teacher to repeats on what she reads. He said: “teacher can you repeat to read for me once more? (Juma). There were no any behaviour/action of the learner observed to: (i) raise up hand to call on the teacher, (ii) respond to several question, (iii) explain his answers and, (iv) talk between learner to learner or talks in small groups in the classroom.

(ii) The observation findings after two weeks (time-rest) after the first observation after intervention

Teacher-Learner interaction

Amina was observed to ask Juma in four times to make clarification or explaining the answer responded to her. Juma was among of the four learners who had been told by the teacher to make clarification or explain more on their answer. For example she asked Juma, as she said: “enheee....Juma tell us more...*nini maana ya kuishiwa nguvu kwa ghafla?* (Amina). It was more than five times that the teacher was seen to use method of asking oral questions and

answers to the individual learner. Learners (including with Juma) often were given a chances to contribute their ideas, as the teacher was teaching ‘the exercise of language use’. The teacher was observed to guide well the learners, as she pointed them one after another, and learners were seen well participating.

More than five times Amina used to ask the questions to the class as whole. Learners were encouraged to elaborate their answer (four times were observed for this behavior), and verbal praise like Very good, Good were given by the teacher to the learners, and three times the teacher was seen to tell the class reward/congratulates Juma by clapping their hands to Juma after responding well the questions asked by the teacher. Amina was seen to talk with Juma (visually impaired learner) in a friendly manner, and she helped him when he faced some difficulties in drawing meaning to his experience on a particular subject matter which she teaches.

The teacher was seen to facilitate talks between learners by guiding one learner to ask a question, and then she pointed another learner to provide an answer. This made learners to participate in the discussion. Frequently the teacher facilitated discussion to the whole class as she made learners to contribute more their ideas and their experience in using language because the lesson was about ‘exercise of language use’. At the end of the period, Amina firstly asked Juma if he understood what they had learn, and later she asked the whole class/learners if they had understood or if there were anyone who had a question and wanted it to ask to the teacher.

Throughout the observation, the following behavior/action was not seen to be done by the teacher: (i) facilitate talks in groups or to form small groups of learners for discussion and, (ii) ask for quiet or disciplines/punish learners.

On the other hands, Juma was observed more than five times to rise up his hand to call on the teacher for response. Four times Juma responded well to the questions asked by his peers with guidance of the teacher, and he explained/clarified his answer when he had been asked to do so. But the following behavior/action was not seen to be done by Juma or other learners: (i) ask question to the teacher and, (ii) talks between learners in groups, and there were none of the groups formed for learners to discuss.

4.2.2 TEACHER BARNABAS

Barnabas was a trained teacher. He had a Certificate in teacher education-Grade IIIA after attending a course for two years. In addition, he had a Certificate and Diploma in Special Needs education both of which obtained after attending a course at Patandi teachers college. Barnabas had ten (10) years of teaching experience including five years teaching in inclusive classroom for learners with and without visual impairment.

INTERVIEW FINDINGS

Knowledge about Inclusive education

Barnabas explained the concept of inclusive education as a system established to provide education to each and every child in the school. He said: “inclusive education is a kind of education where the opportunities to learn are equally given to both children with and without disabilities in a school or classroom” (Barnabas).

Facilitation of learning in the classroom

Good preparation of a lesson and having enough examples. Barnabas pointed that in teaching mathematics subject in his class, firstly he take good time to prepare his lesson, including the Braille notes for the learners with visual impairment. In addition, he puts enough examples in a particular lesson which is going to teach. He said: “when am teaching mathematics in my class, I used to have enough examples, and preparing good notes written in Braille for the learners with visual impairment because when I ask them anything like to read numbers, they had to refer to their given notes or examples found on their notes. The use of examples to these learners is very helpful. Through example, I can make clarifications and solving problem of numbers until I realize that they had understood well”. (Barnabas).

To ensure good interaction with learners in his classroom, Barnabas had mentioned to use oral questions and answers method. He said: “when am asking oral question to learners, and then they replied to me, this kind of conversation make them to understand well on what am teaching. Through the use of this method, all learners in the class including with visually impaired ones can be well involved and participate. For example, most of the time I had a tendency of focusing them, and always to point them to read in their notes before I read in my

teaching notes. So when they made mistake in reading I correct them because I know they had made a mistake” (Barnabas).

Another method was the use of small group of learners to discuss. He pointed that this method as a good one but he did not use this method for quite some years ago. He said: “this is a good method in teaching but it is very hard for me to organize small groups for the young children who I had in my class aged 8 -9 years old. Also the class has so many children almost over forty learners and they are very stubborn in the class. Thus it is extra job to control them while teaching. Thus why am saying this method I did not use it for some few years ago” (Barnabas).

Good and hearable sound. Barnabas explained the importance of using good and hearable sound when teaching. He said sometimes the teacher may get poor response from learner with visual impairment due to low voice used when teaching. He said: “when am speaking, I ensure that every learner hear my voice properly. Learners who are visually impaired had no other means of communicating with me except through talking with them. So it is important for me to make sure that they hear well the sound either when am asking them a question or inquiring them to read their notes or do anything else in the classroom” (Barnabas).

Challenges faced during facilitation of learning in the classroom

Barnabas pointed one challenge which he faced in his class. He said the classroom is big as it has many children. Sometimes it brought some difficulties for him to manage and control the childish behavior of his learners. He said: “teaching learners with visual impairment to me, there is no problem at all. But the problem comes on managing and controlling the learners in my class. Learners are very noising, their number is big, and sometime they don’t hear although sometimes I am reprimanding them or even discipline/punish them. So always in my class I had double roles, one is to teach, and the other is to control and monitor them not to make noise” (Barnabas).

Opinion about facilitation of learning in inclusive classroom

Barnabas suggested that in inclusive schools/classrooms, teachers should be provided with opportunity to attend the training course or some seminar about facilitation of learning to learners with disabilities in inclusive settings. He said: “in our school, the way how real I see

everyday situation, plus the knowledge which I got in training course in special needs education, teaching to these learner's with visual impairment '*in real inclusive classroom*' is less practiced. This is due to the fact that most of our fellow teaching staff did not attend any course or seminar about education for learners with disability. Thus why they lack skills in facilitating learning to these learners. Most of the time, we see the learners with visual impairment are excluded in classroom participation or interaction. But I am not blaming teachers, no! But I am blaming the system (Government). The system should work so as teachers could be equipped with sufficient skills and knowledge to teach in inclusive schools or regular classroom with learners who had disability" (Barnabas).

OBSERVATION FINDINGS

(a)Pre-intervention findings

Sitting arrangement in the classroom

The classroom had three columns of desks, with several raw from the front to the backward. The number of learners was big. Although the desks was seen small in size, each of which were used by four learners. There was little darkness due to small windows of the classroom. The class had two learners with visual impairment, called John, and Rashid. These learners were seated in the front desks in two different columns, and different desks. They had their writing board with Braille word.

Teacher-Learner interaction

It had been observed that Barnabas insisted his learners to make clarifications to his learners who had visual impairment. Four times the teacher was seen to emphasis on this matter. He said: "let's continue with another example. Rashid read the next example. Rashid (a visually impaired learner read from his Braille notes): 3740 shillings plus 6235 shillings. Teacher: John read the same example from your notes! John (another visually impaired learner read his notes): 3765 shillings plus 6235 shillings. Teacher: Rashid read from your notes again! Ok, Rashid is it correct or wrong? (Barnabas).

More than five times, the teacher was seen to use a strategy of asking question to the class as whole. Although he asked question to the class as whole still the teacher always start to inquire a response from the learners with visual impairment. Very seldom the teacher was observed to start to inquire a response from learners without visual impairment. Individual question was asked five times, including three times for Rashid, and two times for John.

Barnabas was observed four times to elicit learners' response, and more than five times to talk and help learners with visual impairment. Only two times the teacher was observed to give verbal praise "Good, very good" to John who always was trying to show a good response when the teacher asked a question. To make learners to focus attention, the teacher used oral question and answer to his learners. This was accompanied by mentioning their names, and this made learners to be seen active and gave good cooperation to their teacher. For example he said: (i) John! What we learned in the last Friday? (ii) Who is able to go and write on the blackboard, fifty shillings and twenty cents? (Since visually impaired cannot go and write this on the blackboard, the teacher appointed other learners to do this) enheee.....Aisha go and write it! (Barnabas). Only three times the teacher was observed to give learners with visual impairment in his class enough time to gather their thoughts before they reply to his question which he asked them. The teacher was seen to be fast in facilitating learning on his classroom.

The learners were very noising in the classroom. This had made Barnabas three times to inquire the learners to be silent or to keep quiet. He said: hello class! Don't make noise please! Am saying keep quiet! (Barnabas). Learners had been observed four times to respond willingly to some questions asked by the teacher. In some cases hands had been raised up to call on the teacher in showing a response to the questions asked to them.

On the other hands, the following were not seen to be practised by the teacher to: (i) send the learner with disability to the blackboard to solve a mathematical problem, (ii) ask the learner if they had any question.

John (a visually impaired learner) was observed to talk with his neighbors'. His neighbors were reading for him the exercise given by teacher which was written on the blackboard. This was also similar happen to Rashid with his neighbors'. The following were not seen to be practiced by learners: (i) talks in groups or the groups to be formed by the teacher, (ii) to ask questions to the teacher.

POST-INTERVENTION OBSERVATIONS FINDINGS

(i) The findings observed one week after intervention

Teacher-Learner interaction

Barnabas was observed four times to ask his learners to clarify their answer and in most cases was Rashid. Only two times, the teacher asked question to the class as whole. More than five times, Barnabas was observed to call for learners' response, talks, and helping learners with difficulties to write by using Braille machines. Learners were encouraged to elaborate their answer, and they were given a chance almost three times observed for them to contribute their ideas. As inquired by the teacher.

Asking the learner individual question was one of the facilitation technique used by the teacher. It was also observed that three times the teacher gave learners enough time in gathering their thoughts before answering the questions asked to them. Similarly learners were asked three times by the teacher if they had understood what the teacher was teaching or if they had any question in relation to what they were learning but there was none who asked a question to the teacher.

The teacher ensured learners to focus attention by calling them their names, and elicit response from them. He said: John! How do we add this number? (Barnabas). In addition, the use of oral questions and answers techniques contributed to make learners active and responding to several questions asked by the teacher. Only two times learners were observed to be motivated where the teacher asked the class to clap the hands three times for John who answered well the questions asked to him. In some few cases the teacher was observed to use verbal praise like "Good or very well". The teacher was also observed more than five times to help learners with visual impairment than the rest of the learners.

Barnabas facilitated talks between learners by asking them guiding questions. There was no any point in which the teacher was observed to facilitate learning to learners in small groups. Further, there were no any learner who had been observed to be sent by the teacher to the blackboard to solve any mathematical problem while other learners observing. On the other hands, John was observed four times to rise up his hand to call on the teacher while only two times the similar event was observed to Rashid.

It was also observed that learners in the classroom were not quiet (attentive). When the teacher was busy in helping Rashid or John (visually impaired learners), other learners were noising. Teacher was observed to be angry with this situation; as a result, some of them who were the main source in noise making were reprimanded by the teacher or given a punishment.

(ii) The findings observed after two weeks (time-rest) after 1st observation after intervention

Teacher-Learner interaction

The observation which had been made showed that five times the teacher was seen to write a mathematical problem on the blackboard and asked oral questions to learners as whole, and then he chosen some learners to go and do it on the blackboard while explaining it to other learners who were looking for him/her. John and Rashid (visually impaired learner) were given written notes which had the same mathematical problems written on the blackboard as the teacher prepared it before he came in the class. Thus they were also asked some oral questions in contributing their ideas in solving the problems which were written on the blackboard.

Barnabas was seen four times to inquire John and Rashid to make clarification on their answers. He said: “Rashid, you said 7070 shillings plus 2575 is equal to 9645 shillings, yes tell us how you managed to get this answer? Tell your fellows how you add it! Ennheeee...Rashid?” (Barnabas). The teacher also was seen several times (it was more than five times) to assists John and Rashid in getting meaning to their learning experience by letting them to contribute their ideas in solving mathematical problems on the blackboard, as well giving them enough time to gather their thoughts before to respond to the question asked to them.

Although the teacher was seen to ask oral questions to the learners as whole, still his intention was observed to keep focus to John and Rashid who were visually impaired learners. He always started to inquire a response from either Rashid or John. Learners were kept to focus attention by regular calling of their names. It had been observed that the facilitation of talks was done by asking oral questions, and eliciting oral responses from the learner. Several times

(as it was observed more than ten times) the teacher used this strategy of facilitation of talks to his learners in the classroom.

It was observed that at the end of his teaching session, the teacher asked his learners if they had any question or problem regarding the lesson which he taught them. He said: “up to this moment, who did not understand? Enhee.... Class? John has you understood? (.....), Rashid have you understood what we have learned? (.....). Ok, class, take your exercise book and do the following exercise which am writing on the blackboard. (.....). John and Rashid tell your neighbours to read this exercise for you from the blackboard. They have only to read for you, and not to tell you the answers. Is it ok? (Barnabas).

The learners in the classroom were observed to be very noising. Four times the teacher was seen to reprimand learners who were making noise. He said: “you Majuto and your fellows there why you are playing? Listen to me”! (Barnabas). Sometime the teacher was seen to ignore those learners who were playing while he teaches. Rashid (visually impaired learner) was observed to be among of the learners who make noise with his neighbouring peers around his desk when the teacher was teaching.

On the other hands, learners (John and Rashid) were observed five times voluntarily raise up hands to call on the teacher. Sometimes the teacher was seen to elect them but one time the teacher did not elect Rashid even though he saw him rise up his hand. Sincerely to speak, John and Rashid was seen positively to try to respond to the several questions asked by the teacher, and they contribute their ideas on what they knew in relation to what teacher asked them.

Talks between learners –learner was observed to happen for Rashid with his neighbouring peers around his desk, and during the time when his neighbouring/ peers were reading for him an exercise from the blackboard. But John was observed to talk with his neighbouring peers only the time when his peers were reading for him an exercise which was written on the blackboard.

The following were not seen/observed to happen in the classroom: (i) the teacher to motivate or praise learners after doing well, (ii) learners to ask question to the teacher and, (iii) talks between learner-learner in small groups, and there were no any group of learning which were formed by the teacher.

4.2.3 TEACHER VICKY

Vicky had Certificate in teacher education, Grade IIIA. She had eleven years of teaching experience, including two years teaching in inclusive classroom which had learners with and without mental retardation. She was teaching standard II learners. In her class, there were two learners with mental retardation, called Lazaro, and Mathias.

INTERVIEW FINDINGS

Knowledge about inclusive education

Vicky mentioned to have a little knowledge about inclusive education. She said: “although am teaching these learners but I did not get any training about educating learners with disabilities. Am telling you the truth, I know nothing about inclusive education. I heard some teachers talk about it, as the acts of including all learners with and without disability to study together in the same classroom.”(Vicky). She mentioned to feel happy when teaching learners with and without mental retardation in her classroom. She said: “I feel happy to teach these learners in my class. But when I started it, I was somehow scared. I was not sure if I could manage it well but now I take it as a normal thing. But I like the way how our head teacher gives us a moral support to help these learners, as he always insisted it in our tea staff meeting. This also tends to inspire me very well” (Vicky).

Facilitation of learning in the classroom

Vicky said that because she did not attend any training course on teaching these learners, she mostly use oral questions, and eliciting response from the learners. She said: “although I did not get any training on special needs education, but am trying to use best of my knowledge to make sure that these learners participate in reading, writing and counting/arithmetic” (Vicky).

She said that her classroom had very young children aged between seven (7) to nine (9) years old. So to manage to teach them requires her always to pass around them, and see if they follow up on what she is teaching them and their peers.

Vicky also mentioned to use songs as other method of facilitating interaction between the learner and the teacher. She said: “these learners are still young, so if am using a song in my lesson, they sang very well, and they look to understand the subject matter quickly than using any other method as they sang and the same time they learn. With this method am sure every learner participates well” (Vicky).

Challenges faced during facilitation of learning in the classroom

One of the challenge faced Vicky was lack of cooperation from parents. She said that parents of learners with disability had no cooperation. She said: “in my class. I had one learner called Lazaro. His parents are not cooperative although they know that their child has problem. We called them more than three times, but they did not come. Until this time, I had tried to use all my efforts and different ways of teaching but still the learner had a problem as he don’t know how to read, and always is not writing. When am teaching, he is just playing childish games. In fact I don’t know what to do with this learner, and his parents refused to come so as we could discuss the problem of the learner together and find its solution” (Vicky).

Opinion about facilitation of learning in inclusive classroom

Vicky suggested that the training of teachers’ trainee in teachers colleges should involve the basic courses in Special needs education in its curriculum. She said: “we regular teachers, we don’t have the skills and knowledge in facilitating learning to learners with and without disabilities in the same classroom. We have these learners in our classroom; but we don’t managing well to teach them like their peers without disabilities because we have not attended any course or seminar on teaching these learners” (Vicky).

She said: “the Ministry of education should consider the possibility of introducing compulsory courses in the curriculum of teacher education for grade IIIA and Diploma course in education so as to enable the graduates teachers from these course to teach well the learners with and without disabilities in inclusive classroom or regular classroom as well as to be good ambassadors to the teachers who did not got any training course about teaching these learners” (Vicky).

OBSERVATION FINDINGS

(a)Pre-intervention findings

Sitting arrangement in the classroom

It had been observed that there were three column of desk in the classroom. Each desk were seated three or four learners. The classroom had two learners with mental retardation, called Lazaro, and Mathias. Mathias seated in the mid-column desks, the third desk from the front of the classroom. Lazaro seated on the first column from left, the last desk from the front.

Teacher-Learner interaction

The observation showed that Vicky asked individual learner a question (Mathias) only one time. She was seen to ask question to the class as whole in three times. She was observed to starts her lesson by writing notes on the blackboard, and then she asked the learners as whole to read it loudly, and then to write it on their exercise book. There were no any efforts observed to be made by the teacher to ensure that learners with mental retardation are participating.

Teacher was seen to move around in every desk to see if learners were writing. But when she passed to the desks seated Lazaro, she saw Lazaro was not writing. He was only playing alone. Teacher did not take any action or any effort made to make him to write or read. On the other hand, Mathias was observed to be silent and cool all the time. He was seen imitating to learn through his lips of mouth, but he did not tried to read it loudly alone. Mathias was also observed to write notes written by the teacher on the blackboard.

The following skills were not observed to be used by the teacher: (i) to asks learners for clarification, (ii) to asks or give learners a chance to contribute their ideas, (iii) send the learner to the blackboard, (iv) give learners a chance to contribute their ideas, (v) give learners a relevant praise and acknowledgement, (vi) give time learners to gather their thoughts and,

(viii) asks learners for quiet or keep silence in the classroom. Also the learners were observed and did not practice the following: (i) did not raise hands i.e. call on for the teacher, (ii) did not ask any question to the teacher, (iii) there were no talks between the learners either in learner to learner or learners in groups.

4.2.4 TEACHER SARAH

Sarah had attended teacher education course as she qualified to obtain a Certificate of Teacher Education grade IIIA. She had experienced in teaching for twenty (20) years, including five years teaching in inclusive classroom for learners with and without mental retardation.

INTERVIEW FINDINGS

Knowledge about inclusive education

Sarah did not attend any training about teaching learners with disabilities. She used a general knowledge obtained in teacher education to teach both learners with and without disabilities in her classroom. She said: “I know that disability is not inability. So I think inclusive education is good not only for learners themselves but even for us teachers in considering all these learners in the classroom. All learners are provided with education which is similar, whether they have disability or not. It is good education because it put away segregation among learners or teachers in facilitating learning” (Sarah).

Facilitation of learning in the classroom

The use of oral question and answer method is one the method which is used by Sarah to facilitate interaction with her learners. She said: “because I did not get training course in special needs education, am using the knowledge which I got in my teacher training. Mostly am using oral question and answer method in teaching in my classroom” (Sarah).

Grouping of learners in small groups and facilitation of discussion among learners in groups is another method mentioned to be used by Sarah. She said: “am also sometimes using small group discussion. Am grouping learners in small groups, and then I give them a task to discuss, and then inquire them to give answers from each group or if it is something that can be demonstrated, then am choosing the learner from each group and go in front to show others

what they had discussed or their right answer while others remain as observers” (Sarah). She said that not all topics or lesson the teacher may use a group discussion method. She said sometimes it is difficult for some topics, and if this happen, she switched herself to another method which she thought would be appropriate in that lesson for learners to understand.

Teaching slowly, step by step in inclusive classroom is another strategy used by Sarah to ensure that the learner who is mentally retarded is following what she is teaching and understand the lesson taught. She said: “to ensure good facilitation to learners who have mental retardation, am teaching slowly, steps by steps, this made them to follow up and understand what am teaching” (Sarah).

To give learners motivation during teaching had also mentioned by Sarah to be one of the factor which help to increase interaction with learners who had mental retardation. She said: “the use of motivation in my class helps to make both learners with and without mental retardation to contribute more ideas in the classroom. Verbal praise like good or very good, and sometimes clapping the hands to the learner who perform well in answering the question, tends to stimulate other learners to try more and more in answering the questions asked to them” (Sarah).

Teaching by using relevant teaching aids is another way of increasing interaction with learners who are mentally retarded. She said: “I see the use of teaching aids to these learners is very important. It adds more meaning on what am teaching. To me, it is very rare to teach these learners without teaching aids. In fact I cannot manage; it will be very difficult job for them to understand. If am using teaching aids, it is easier for learners to follow up, and sometime you can place them in groups and let them discussing a subject matter in relation to the teaching aids provided to them” (Sarah).

Challenges faced during facilitation of learning in the classroom

Sarah had mentioned two challenges: the size of the class being big (number of learners per class), and lack of training to in-service teachers. She said her classroom had fifty six learners, including one who is mentally retarded. She said: “to manage to teach in larger class like this, real it needs extra effort and commitment of the teacher so as to make at least all learners understand what am teaching” (Sarah).

Lack of in-service training for teachers also is another challenge. She said: “I had been in the field of teaching for twenty years now. Inclusive education came in recent years, now how can I know to teach in inclusive classroom without getting training about it? There is no seminar or short course, and now this is the fifth year since I started to teach these learners with mental retardation together with those without mental retardation!” (Sarah).

OBSERVATION FINDINGS

(a)Pre-intervention Observation findings

Sitting arrangement in the classroom

The classroom had four columns of learners’ desks from left to right. It had several rows from the front area to the back of the classroom. Learners were seated in four people for every desk. The learner who was mentally retarded called Kabuku, seated in the first column from left, in the third desk on the side of the wall of the classroom. He was always cool, and looks very attentive to the teacher.

Teacher-Learner interaction

It had been observed that Sarah asked oral questions three times to Kabuku (a mental retarded learner). Two times the teacher was seen to call Kabuku in front and make presentation on what he discussed with his learners in his group. Teacher more than five times was observed to ask questions to the learners as whole. Several times (more than five times) the teacher was observed to elicit a response from learners (including with Kabuku). The teacher inquiry learner to contribute their ideas, and she was seen to give them enough time to gather their thoughts before answering.

Sarah was observed to have a number of teaching aids prepared, and she distributed it in every group which she formed among learners. Learners were observed to discuss in small groups, and then they demonstrated in front of the classroom as they were chosen by the teacher. Kabuku was one of the learners observed two times to presents things discussed in

their group in front of others, and he did very well. Teacher said: “Kabuku, come in front and show us 12:30 PM in your watch as you discussed it in your group! Come Kabuku come! (Sarah).

In motivating learners during teaching, Sarah was observed to give her learners either verbal praise like very good or good/well and sometimes she told the rest of the learners to clap the hands to the learner who did very well. Three times she was seen to inquire the other learners to clap the hands to congratulate Kabuku for good answering of the questions asked to him. She said: “ok, class let’s congratulate Kabuku for good answering of the question. You have to clap your hands three times! Ok, start!” (Sarah).

Two times, Sarah was seen to make clarifications on answers responded to Kabuku, and this helped to add meaning to the learners’ experience. To make learners focus attention, Sarah called her learners by mentioning their names, and always she was passing around the learners’ desks and in small groups formed, to see their progress and their participation.

On the other hand, the following were not seen to happen in the classroom: (i) Kabuku did not ask any question to the teacher or any other learner to ask a question to the teacher, (ii) although he responded to the teachers’ questions, but still he did not manage to explain well his answer to the rest of the class.

4.3 SUMMARY OF THE FINDINGS

The following section presents the summary of the findings for each case, in relation to the research questions.

4.3.1 AMINA

(a) Interview findings

TEACHER-LEARNER INTERACTION	LEARNER-LEARNER INTERACTION	TEACHER FACED CHALLENGES
<ul style="list-style-type: none"> Effective use of teaching aids 	None	<ul style="list-style-type: none"> Lack of appropriate teaching and learning

<ul style="list-style-type: none"> • The use of oral question • Motivating learners i.e. verbal praising or clapping hands by their peers in class. 		<p>materials for learners with visual impairment. This includes include hardboard for drawings, color, manila sheet, wood and other resources like Perkins Braille in which learners are required to use in writing.</p> <ul style="list-style-type: none"> • No special needs educator.
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(b) Observation findings before intervention

SKILLS OBSERVED IN FACILITATION OF TEACHER-LEARNER INTERACTION IN THE CLASSROOM	NUMBER OF EVENTS
Teacher asks for clarification of the learners' answer	2
Teacher asks individual learner a question	5
Teacher asks the learner if he/she have a question	1
Teacher send the learner in front to demonstrate things/role play or solve a problem on the blackboard	0
Teacher asks question to the class as whole	5
Teacher give a chance for the learner to contribute ideas	2

Teacher encouraging learners to elaborate their answer	1
Teacher calling for frequent learners response	5
Teacher make the learner to focus attention	3
Teacher asks for a quiet/ silence to the learners	0
Teacher discipline or punish learners	0
Teacher to give time the learner to gather their thoughts	2
Teacher assists in giving meaning to the learner experience	2
Teacher talks and help the learner who had difficulties	1
The learner to raise up hand to call on the teacher	1
The learner respond to several questions asked by teacher	5
The learner asking a question to the teacher or asks for help	0
OBSERVED SKILLS FOR TEACHER TO FACILITATE LEARNER-LEARNER INTERACTION	
Teacher to facilitate talks between learners in groups	0
Teacher to facilitate talks among learners (learner-learner interaction).	0

(b) Observation findings after intervention

SKILLS OBSERVED IN FACILITATION OF TEACHER-LEARNER INTERACTION IN THE CLASSROOM	NUMBER OF EVENTS
Teacher asks for clarification of the learners' answer	4

Teacher asks individual learner a question	5
Teacher asks the learner if he/she have a question	2
Teacher send the learner in front to demonstrate things/role play or solve a problem on the blackboard	0
Teacher asks question to the class as whole	5
Teacher give a chance for the learner to contribute ideas	5
Teacher encouraging learners to elaborate their answer	4
Teacher calling for frequent learners response	5
Teacher make the learner to focus attention	4
Teacher asks for a quiet/ silence to the learners	0
Teacher discipline or punish learners	0
Teacher to give time the learner to gather their thoughts	4
Teacher assists in giving meaning to the learner experience	5
Teacher talks and help the learner who had difficulties	4
The learner raise up hand to call on the teacher	5
The learner respond to several questions asked by teacher	4
The learner asking a question to the teacher or asks for help	0
OBSERVED SKILLS FOR TEACHER TO FACILITATE LEARNER-LEARNER INTERACTION	
Talks between learners in groups	0
Talks among learners (learner-learner interaction).	5

4.3.2 BARNABAS

(a) Interview findings

TEACHER-LEARNER INTERACTION	LEARNER-LEARNER INTERACTION	TEACHER FACED CHALLENGES
<ul style="list-style-type: none"> • The use more examples in a lesson • The use of oral question • Good and hearable sound to learners with visual impairment 	None	<ul style="list-style-type: none"> • Many learners in the classroom brings difficulties in teaching well • Lack of teaching and learning materials for learners with visual impairment such as books, machines like Perkin Braille etc

(b) Observation findings before intervention

SKILLS OBSERVED IN FACILITATION OF TEACHER-LEARNER INTERACTION IN THE CLASSROOM	NUMBER OF EVENTS
Teacher asks for clarification of the learners' answer	4
Teacher asks individual learner a question	5
Teacher asks the learner if he/she have a question	0
Teacher send the learner in front to demonstrate things/role play or solve a problem on the blackboard	0
Teacher asks question to the class as whole	5
Teacher give a chance for the learner to contribute ideas	5

Teacher encouraging learners to elaborate their answer	4
Teacher calling for frequent learners response	5
Teacher make the learner to focus attention	5
Teacher asks for a quiet/ silence to the learners	3
Teacher discipline or reprimand learners	3
Teacher to give time the learner to gather their thoughts	3
Teacher assists in giving meaning to the learner experience	4
Teacher talks and help the learner who had difficulties	5
The learner raise up hand to call on the teacher	2
The learner respond to several questions asked by teacher	4
The learner asking a question to the teacher or asks for help	0
OBSERVED SKILLS FOR TEACHER TO FACILITATE LEARNER-LEARNER INTERACTION	
Talks between learners in groups	0
Talks among learners (learner-learner interaction).	2

(b) Observation findings after intervention

SKILLS OBSERVED IN FACILITATION OF TEACHER-LEARNER INTERACTION IN THE CLASSROOM	NUMBER OF EVENTS
Teacher asks for clarification of the learners' answer	4
Teacher asks individual learner a question	5

Teacher asks the learner if he/she have a question	1
Teacher send learners in front to demonstrate things/role play or solve a problem on the blackboard	3
Teacher asks question to the class as whole	5
Teacher give a chance for the learner to contribute ideas	5
Teacher encouraging learners to elaborate their answer	5
Teacher calling for frequent learners response	5
Teacher make the learner to focus attention	5
Teacher asks for a quiet/ silence to the learners	4
Teacher discipline or punish learners	4
Teacher to give time the learner to gather their thoughts	4
Teacher assists in giving meaning to the learner experience	5
Teacher talks and help the learner who had difficulties	5
The learner raise up hand to call on the teacher	5
The learner respond to several questions asked by teacher	5
The learner asking a question to the teacher or asks for help	0
LEARNER-LEARNER INTERACTION	
Talks between learners in groups	0
Talks among learners (learner-learner interaction).	4

4.3.3 VICKY

TEACHER-LEARNER INTERACTION	LEARNER-LEARNER INTERACTION	TEACHER FACED CHALLENGES
<ul style="list-style-type: none"> • The use of oral question method • The use of songs 	None	<ul style="list-style-type: none"> • Lack of cooperation from parents who had learners with disabilities • Lack of training in special needs education courses.

(b) Observation findings before intervention

SKILLS OBSERVED IN FACILITATION OF TEACHER-LEARNER INTERACTION IN THE CLASSROOM	NUMBER OF EVENTS
Teacher asks for clarification of the learners' answer	0
Teacher asks individual learner a question	1
Teacher asks the learner if he/she have a question	0
Teacher send the learner in front to demonstrate things/role play or solve a problem on the blackboard	0
Teacher asks question to the class as whole	3
Teacher give a chance for the learner to contribute ideas	0
Teacher encouraging learners to elaborate their answer	0

Teacher calling for frequent learners response	1
Teacher make the learner to focus attention	1
Teacher asks for a quiet/ silence to the learners	1
Teacher discipline or reprimand learners	1
Teacher to give time the learner to gather their thoughts	0
Teacher assists in giving meaning to the learner experience	1
Teacher talks and help the learner who had difficulties	2
The learner raise up hand to call on the teacher	0
The learner respond to several questions asked by teacher	0
The learner asking a question to the teacher or asks for help	0
OBSERVED SKILLS FOR TEACHER TO FACILITATE LEARNER- LEARNER INTERACTION	
Talks between learners in groups	0
Talks among learners (learner-learner interaction).	0

4.3.4 SARAH

(a) Interview findings

TEACHER-LEARNER INTERACTION	LEARNER-LEARNER INTERACTION	CHALLENGES FACED TEACHERS
<ul style="list-style-type: none"> • The use of oral question method • The use of small group discussion • Teaching slowly, step by step • The use of relevant teaching aids • The use of motivation to learners. 	<ul style="list-style-type: none"> • The use of group discussion among learners 	<ul style="list-style-type: none"> • Overcrowding of learners in one classroom • Lack of in-service training for teachers

(b) Observation findings before intervention

SKILLS OBSERVED IN FACILITATION OF TEACHER-LEARNER INTERACTION IN THE CLASSROOM	NUMBER OF EVENTS
Teacher asks for clarification of the learners' answer	0
Teacher asks individual learner a question	3
Teacher asks the learner if he/she have a question	0

Teacher send the learner in front to demonstrate things/role play or solve a problem on the blackboard	3
Teacher asks question to the class as whole	5
Teacher give a chance for the learner to contribute ideas	3
Teacher encouraging learners to elaborate their answer	2
Teacher calling for frequent learners response	5
Teacher make the learner to focus attention	4
Teacher asks for a quiet/ silence to the learners	0
Teacher discipline or punish learners	0
Teacher to give time the learner to gather their thoughts	3
Teacher assists in giving meaning to the learner experience	2
Teacher talks and help the learner who had difficulties	0
The learner raise up hand to call on the teacher	0
The learner respond to several questions asked by teacher	2
The learner asking a question to the teacher or asks for help	0
OBSERVED SKILLS FOR TEACHER TO FACILITATE LEARNER-LEARNER INTERACTION	
Talks between learners in groups	5
Talks among learners (learner-learner interaction).	5

CHAPTER FIVE: DISCUSSION, CONCLUSION, AND RECOMMENDATIONS.

5.1 INTRODUCTION

The following is the discussion for all four cases. The phenomenon of the study was teachers' facilitation of learning to learners with disabilities in inclusive classroom. The main focus was to look how teachers facilitate learning by interacting with learners who had disabilities in inclusive classroom, and the ability of the teacher to facilitate interaction among learners with and without disability (learner-learner interaction) in the classroom. Attention had also been given on challenges encountered by teachers during facilitation. In addition, the effect of using 'teachers for all' DVD material in influencing teachers' facilitation in inclusive classroom had been studied.

The study was carried out with four selected teachers. The analysis of the study was based on some themes which were identified from the research questions. The chapter is going to constitute a discussion on the findings in chapter four in relation to the research questions, themes, and the relevant literature discussed in chapter two. Conclusion remarks and recommendations will also follow the discussion. Each case is hereby discussed below.

5.2 DISCUSSION

5.2.1 TEACHER AMINA

(a) Facilitation of teacher-learner interaction

The study indicated that Amina employed different methods in facilitating interaction with the learner who was visually impaired. Vygotsky (1978) in his theory of development, points out the fact that teaching is most effective in what he calls the zone of proximal development of the child. This involves the distance between what a child can do independently and what he or she can do better with the help of adults or more capable peers. So the teachers are there to

assist the learners and increase their levels of understandings so that they can perform in a greater level. In section 4.2.1 in the study, Amina made mention of the fact that she tries to find some methods which makes all learners-with and without visual impairment to participate during her teaching and learning session in the classroom.

Although the teacher during her interview session mentioned to prepare and use teaching aids, unfortunately during the classroom observations the teacher was not seen to have or use any teaching aids. The use of teaching aids in the classroom tends to help learners to gain more understanding and retain attention (Cummings, et al, 1982).

The other teaching strategy used to enhance interaction between teacher and learners was the use of oral question and answers. Amina mentioned the method to be very useful in her class. This was due to the fact that she had the learner who was visually impaired, so the use of oral questions resulted to oral response from the learner, hence build understanding of the lesson or subject matter taught. She added that, the method was also good in drawing learners' attention, and this made the learner to be active and feel recognized as other learners without visual impairment. As Vygotsky says learners with developmental impairment need concrete learning materials and circumstances. First, and foremost, they need guidance in the direction of more abstract to general cognitive function (Vygotsky as cited in Johnsen, 2001).

(b)Facilitation of Learner-Learner interaction

The socio-cultural theory of learning recognize the fact that cognition is not an individual construction; rather it is a collaborative process which is intrinsically related to participation and interaction with others in socio-culturally relevant activities such as inclusive classroom where learners with disabilities may learn and discuss various matters on different subjects for their academic development. The study indicated that the teacher did not facilitate interaction among learners themselves either in small group discussion or learner to learner. Interaction appeared only naturally when a visual impaired learner asked his neighbor to read for him from the blackboard when he was writing an exercise given by the teacher and not otherwise. The teacher was seen either to lack the skills for facilitating interaction among learners or she have the skills but did not familiarized on using it in her classroom.

(c) Challenges faced the teacher in facilitating learning in inclusive classroom

Inclusive education is a move away from an orientation that tends not to challenge or alter the organization, curriculum or forms of teaching offered to children in general. It is concerned with how schools can be developed in order to respond positively to all learners as individuals (Ainscow, 1996). It is not just placing disabled learners in the classroom with their non-disabled peers; it is definitely not dumping learners into unchanged system of provision and practice. A restructured curriculum and pedagogy, teaching and learning materials, teachers accept responsibility and the support to learners with disabilities should be the factors for the success and should be planned in an unobtrusive manner (Mittler and Mittler, 1999). The study showed the teacher to be faced with some challenges during the facilitation in her inclusive classroom. The challenges tend to affect the teacher in one hand, and the learner on the other hand. Teacher had been faced with the lack of appropriate teaching and learning materials for learners with visual impairment. This contributes to drawback the teachers' effort in teaching. This includes lack of hardboard for drawings, color, manila sheet, wood, writing equipment for learners such as Perkins Braille. Also there was no special needs educator in the classroom/school. These were some of the factors which imposed a barrier for teacher to enhance well teaching and learning in her inclusive classroom.

(d)The effects of the 'Teachers for all' DVD material

The use of the 'Teachers for All' DVD materials in the study had been seen to contribute a lot to shed the light to the teacher in facilitating learning in her classroom. The earlier findings before the intervention indicated that, the teacher had good knowledge and skills in areas of asking individual learner questions, asking question to the class as whole, and calling the learner to elicit a responses due to the questions asked. This performance had been seen to be maintained by the teacher even after the intervention period.

On the other hand, the teacher was observed to have inadequate knowledge and skills in the following areas: asking for clarification of the learners answer, asking the learner if he/she had a question, teacher to give a chance for the learner to contribute ideas, encouraging learners to elaborate their answer, and making the learner to focus attention. Also other areas include the teacher to give enough time the learner to gather their thoughts, assisting the learner in giving meaning to his/her learning experience, talk and help the learner who had

difficulties, and the ability to facilitate talks among learners. The use of the ‘Teachers for All’ DVD materials for intervention had been seen to brought a positive change in improving the knowledge and skills of facilitation of the teacher after intervention in comparison to the previous findings.

The literature reveals that, in enhancing learning in inclusive classroom, the role of the teacher should be central in scaffolding learners’ use of language. The facilitation strategies like leading questions, hints, and group discussions may help in achieving the goal. When competencies grow, the teacher should withdraw support and encourages learners to self-regulate their activity (Rogoff, 1990). The findings showed some improvements of knowledge and skills in facilitation of learning in areas of (i) asking for clarification of learners’ answer, (ii) asking the learner if he/she have any question, (ii) making the learner to focus attention, (iii) teacher to give the learner enough time to gather their thoughts, (iv) teacher to talk and help the learner who had difficulties.

The material ‘Teachers for All’ had lead to a better improvements of the teachers’ competencies and performance in the following areas: (i) giving a chance to the learner to contributes ideas, (ii) encouraging the learner to elaborate their answer, (iii) assisting the learner in giving meaning to his/her experiences and, (iv) facilitating talks among learners (learner-learner interaction) by guiding them.

5.2.2 TEACHER BARNABAS

(a) Facilitation of teacher-learner interaction

The findings showed that Barnabas was capable enough to facilitate learning to his learners. He employed different strategies and techniques to enhance interaction with learners. The quality of interaction between the teacher and learners in the process of teaching and learning is an important factor in improving the efficiency of lesson (Offir, 1999; Oliver and Mc Loughlin, 1996). The teacher-learner interaction attempts to motivate and stimulate the learner, and allows for clarifications and understanding of the content to the learner (Moore, 1989).

The study indicated the teacher to use oral questions and answers for the learner, good and well hearable sound which enabled the learners with visual impairment to make a good follow

up on what he was teaching. In addition, the teacher was well prepared with enough examples in his subject. This provided a good opportunity for visual impaired learners to participate and gain more knowledge like their peers who were without visual impairment.

Although there is significant use of teaching aids in the classroom to enhance more understanding to the learners, the teacher was not seen to have any. Also the teacher did not demonstrate the knowledge and skills of using small group discussion in his classroom.

(b)Facilitation of Learner –Learner interaction

The socio-cultural theory of learning explains that social interaction and the use of language are the two primary means which enable learners to acquire good learning. Language use may enable the learner to increase ability to engage in social interaction and share experiences. The learner' new knowledge could be interpsychological at the initial stages where interaction involves people such as parents, siblings, caregivers, peers and other relatives. At later stage the same knowledge and skills become intrapsychological: meaning inside the learner. Thus in the school/classroom, social interaction and language may play an important role for learners to acquire skills, values, and knowledge. Teachers may play an important role to stimulate and enhance acquisition of knowledge and skills through interaction. Despite its importance, the study showed that the teacher was not able to facilitate interaction among the learners themselves. Teacher-learner interaction was seen more dominant than learner-learner interaction.

Interaction among the learners was only observed when visual impaired learners asked their peers without impairment to read some questions (exercise given by the teacher) from the blackboard. Few other interactions were seen when Rashid (visual impaired learner) was playing with his neighbors while the teacher was teaching them. Generally to speak, there was no any knowledge or skills applied by the teacher to enhance interaction among learners to consolidate their understanding for the lesson taught.

(c)Challenges faced the teacher in facilitating learning in inclusive classroom

In achieving the goal in Special needs education, there is a need to work in mutual cooperation. The needs for change in some aspects of schooling are necessary in order to

remove barriers and challenges as a means to enhance the success of learning in inclusive classroom. Some of the aspects for change may include school curriculum, buildings, school organization, pedagogy, and ways of making assessment, staffing, school ethos and extra-curricular activities (UNESCO, 1994). The findings indicated the teacher to be faced with some challenges in classroom control and management. It was observed that the teacher: learner ratio was imbalanced. The number of learners was big, and they were young children (7 to 9 years old). This brought some difficulties for teacher to control their behavior while teaching. Always the teacher was seen to reprimand the learners who were source in noise making but due to their young age, they always repeated their behavior of noise making something which was seen to make the teacher become angry to them.

The other challenge was the shortage of reading books/materials written in Braille words for learners with visual impairment. Teacher was seen to have an extra-task of writing the learning notes for every learner (visual impaired). The school has no books or learning materials written in Braille words. It was also a challenge for learners themselves to write an exercise given by the teacher at the end of the period where they depend from their peers to read for them from the blackboard. So they listen from them, and then write it in Braille words in their exercise books.

(d)The effects of the ‘Teachers for all’ DVD material

The findings from the study revealed that although the ‘Teachers for All’ DVD materials contributes to adds more knowledge and skills to the teachers’ understanding of how to manage inclusive classroom and teach learners with disabilities, still to some extent the teacher was seen to have the good knowledge and skills in facilitating learning in his classroom. The earlier findings before intervention indicated the teacher to have good knowledge and skills in areas of (i) leading learners to make clarifications of their answer, (ii) asking individual learner a question, (iii) giving a chance for learner to contribute their ideas, (iv) encourage learners to elaborate their answer, and calling for frequent learners’ response. The other demonstrated skills included (vi) ability to make the learner focus attention, and (vii) talking and helping learners with difficulties in the classroom. Due to such mentioned knowledge and skills in facilitation, the teacher got positive responses from learners with visual impairment as they responded to several questions which were asked and elicited by the teacher.

The study also showed that the teacher had inadequate knowledge and skills in areas of classroom control and management, facilitation of talks among learners (learner-learner interaction) by guiding them, and the use of role-play exercise/calling on the learner in front to demonstrate thing/ role play-exercise in the classroom.

Human potential is theoretically limitless; but their potential limits depend upon the quality of interaction and residential environment (Vygotsky, 1978). This is to say that the use of the ‘Teachers for All’ DVD materials had contributed much in improving the knowledge and skills of the teacher. It provides more exposure to the teacher on how to manage and teach learners with disabilities in inclusive classroom. This was clearly evident in the findings obtained after intervention where the teacher had demonstrated better competencies, skills, and confidence in leading learners to make clarifications of their answer, asking individual learner a question, giving a chance learner to contribute their ideas, encouraging learner to elaborate their answer, calling on for frequent learners’ response, ability to make the learner focus attention, as well as talking and helping learners with difficulties in the classroom.

Also the intervention made with the material ‘Teachers for All’ had contributed to lead the teacher in making a good improvement in areas such as calling on the learner in front to solve mathematical problems on the blackboard, asking learners questions if they had understood the lesson taught or not (summative evaluation), and if they had any question to ask the teacher. This had been seen to be well improved in comparison to the earlier findings before intervention.

5.2.3 TEACHER VICKY

(a) Facilitation of teacher-learner interaction

The findings indicated that the teacher mostly use oral questions and answer method, and the use of songs in facilitation of learning in her classroom. To enhance interaction, the use of songs in teaching was seen a best method for the teacher to interact with her learners due to young age of the children (7 to 9 years old). Although the role of the teacher is to help learners to shape their goals and ambitions to areas where disability is not handicap, and benefit from a variety of experience which can help them to integrate fully in life (Cosin and Hales, 1997), the teacher did not show any help or an experience in facilitating the learner

with disability in her classroom. She only demonstrated general knowledge in teaching learners in the classroom.

(b)Facilitation of Learner –Learner interaction

The study did not show any knowledge and skills demonstrated by the teacher in facilitating learner-learner interaction. Teacher wrote her work in the blackboard and told her learners to read it loudly. Further, the teacher was observed to distribute reading books and ask them to read as a whole class loudly. So to speak, the teacher did not have enough knowledge or skills which could enable her to measure the individual learner skills where she could discover the learners who need her help or assistance in reading.

(c)Challenges faced the teacher in facilitating learning in inclusive classroom

From the findings, it showed that the teacher was faced with problem of lack of training in special needs education. Perhaps with the training, the teacher could get enough knowledge and skills which could help her to be exposed with a variety of teaching strategies and techniques of facilitating learning in her inclusive classroom. The other challenge faced the teacher was the lack of cooperation from the parents who had learners who were mentally retarded in her class. Although they had been called for several times, still they did not come. This situation brought a dilemma to the teacher in finding solution regarding the poor progress of the learner.

(d)The effects of the ‘Teachers for all’ DVD material

Vicky attended the intervention made with the ‘Teachers for All’ DVD material, but she was not observed in the classroom after the intervention due to some inconveniences’ which she faced with. The earlier findings of the teacher were not good at all in comparisons to other teachers observed. The teacher did not demonstrate any competence and skills in the following areas: asks for clarification of the learners’ answer, giving the learner a chance to contribute ideas, encouraging and lead learners with disability, giving the learner enough time to gather their thoughts before answering, and asking the learner if he/she has a question or

need any help. Another inadequate competence and skills for the teacher were shown in asking individual learner a question, asking questions to the class as whole, calling for frequent learners response, making the learner to focus attention, assisting the learner in giving meaning his/her experiences, and classroom management and control.

Lack of training for the teachers also may contributes to the poor facilitation of learning to learners with disabilities in the classroom. For example teacher Vicky said although she was teaching learners with and without mental retardation in her classroom but she was not attended any course about Special needs education or seminar or short course about it. Further, the exposure in which the teacher got by watching the 'Teachers for All' DVD materials may shed the light to the teachers' understanding on how to manage inclusive classroom and teach learners with disabilities. This possibly may results in some improvements to the teacher in facilitating learning in her classroom, as it was a case to other two teachers (Amina and Barnabas) who showed well positive encouraging results after the intervention, and observation in the classroom. But also to strengthen her teaching carrier , it could be important if the teacher could get a chance to attend in-service training course in Special needs education for the betterment of the teacher herself, school and the whole nation.

5.2.4 TEACHER SARAH

(a)Facilitation of teacher-learner interaction

When the teacher facilitates learning through using interaction kind of communication in the classroom, learners are able to expand and modify schemata of knowledge in the light of new experience by exploring ideas, reformulating, reflecting on, and representing them (Galton et al, 1999). The study indicated the teacher to employ different methods in facilitation of learning by interacting with her learners. The teacher used oral question method, small group discussion among learners themselves while she remained as a facilitator by guiding them, as she rotates from one group after another. Also the teacher effectively used the teaching aids in enhancing the discussion to her learners whereby every group were provided with a learning aid to discuss it. Further, the teacher frequently used encouraging language of motivation to her learners in areas which they were seen to perform well. The ability of the teacher to teach

her lesson systematically by going slowly, step by step added an interests for learners to make good follow up.

(b)Facilitation of Learner –Learner interaction

Grasping of knowledge for learners depends on good learning and strategies employed by the teacher, and good organization and management of the classroom in the whole process of learning. This may include flexibility in multiple uses of methods and approaches including a classical methodology of breaking down the learning task into small ones so as to meet different educational needs of learners (Johnsen, 2001). The use of small group discussion by the teacher provided an opportunity for Kabuku (a mentally retarded learner) to participate in discussion with his peers in their group. The teacher elicited well response from him, and the learner went in the front two times to demonstrate the right answer on what they had been discussing with his peers. Although the learner was seen silent but when it comes in learning, he participated well with his neighbor. The teacher was also paying a good attention to ensure that Kabuku was being involved and participate like other learners without disability.

(c)Challenges faced the teacher in facilitating learning in inclusive classroom

Although the teacher was seen well experienced and manage to facilitate well learning to learner with disability, still she needs more training in special needs education so as to improve well her knowledge and skills of facilitation. The other challenge was the size of the classroom. The classroom was observed to have many learners, and it was overcrowded. This sometimes brought a challenge in controlling those noise makers and at the same time continuing with the facilitation.

(d)The effects of the ‘Teachers for all’ DVD material

Although the teacher was not observed after the intervention but the earlier findings indicated that the teacher had little knowledge and skills in enhancing facilitation in areas of (i) asking individual learner questions, (ii) giving a chance for learners to contribute ideas, (iii) encouraging learners to elaborate their answer, and (iv) giving enough time to gather their thoughts before answering the question.

On the other hands the teacher demonstrated good competencies and skills in facilitating learning in the following areas: (i) facilitating talks between learners in their groups, (ii) facilitating talks in learner-learner interaction, (iii) calling for frequent learners responses, (iv) asking question to the class as whole, and (v) making learners to focus attention. The findings gave the prediction that if the teacher could get the chance to be observed in the classroom after the intervention, probably she could improve in those areas which were seen to have little knowledge and skills hence resulting to a good and encouraging findings. In reference to the other two teachers (Amina and Barnabas) who had been observed after the intervention and showing good results and improvements made in facilitation of learning in inclusive classroom, perhaps teacher Sarah could also improved her performance in facilitation of learning in her classroom as a results of the exposure she got after watching the ‘Teachers for All’ DVD materials.

5.2.5 THE TEACHERS’ OPINIONS TO IMPROVE FACILITATION OF LEARNING FOR LEARNERS WITH DISABILITIES IN INCLUSIVE CLASSROOM

The following discussion presents teachers views on what should be done to improve the learning for learners with disabilities in inclusive classroom. To start, they asked for the curriculum developers to design school curriculum in a flexible way which will enable teachers to adapt it in easier manner and meet the learners’ needs. In developing the curriculum content, attention should be made to consider learners with special educational needs basing on individuals’ learning needs. This implies that, the national curriculum should be formulated in such a way that meaningful participation could be possible by all learners regardless of their individual characteristics and needs. The curriculum should be one in which all learners could participate. Otherwise it may be counterproductive and unsuitable for any meaningful integration (Dyson and Millward, 2000).

Lack of teaching and learning materials had been mentioned by teachers to be among of the factors which affect them. They were inquiring the authorities (Ministry of education) to put more emphasis on the provisions of resources which could enable teachers to smooth the facilitation of learning to learners with disabilities in their schools.

Overcrowding of learners in the classroom creates unfavorable conditions to enhance effective follow up, classroom management, and effective teaching and learning. The class

size had to be reduced to less and bring favorable teacher-learner ratio so that to meet the needs of learners with and without disabilities.

The study also reveals that two teachers lacked the training in special needs education, and for this reasons, they were asking the relevant authorities (Ministry of education) to intensify in-service training so that facilitation of learning to learners with disabilities could be well implemented. Inclusion should involved in-service reorientation and upgrading of the teachers so that they could be able to contribute and relate the flexibility in which inclusion entails (Skjørten, 2001).

5.3 CONCLUSION

The purpose of the study was to examine how teachers facilitate learning to learners with disabilities in inclusive classroom in two selected primary schools in Tanzania. Various challenges encountered teachers during facilitation were studied and discussed. In addition, the effect of using 'Teachers for All' DVD material in influencing teacher-learner interaction, and learner-learner interaction was studied. The findings of the study show that teachers' facilitation of learning to learners with disabilities in inclusive classroom was good for three teachers. These teachers were seen to have knowledge, skills and good competencies in facilitating interaction with learners who had disabilities, and encouraging skills in facilitating learner-learner interaction. The findings obtained from the forth teacher was not good. This teacher did not show any knowledge, skill or competence in either facilitating interaction with her learners who had disability or facilitate interaction between learners with, and without disability. She only demonstrates little knowledge of teaching in classroom with regular learners.

Teachers were also seen to be faced with some challenges in their facilitation. Some of them include lack of enough knowledge, skills and experiences teaching learners with disabilities in inclusive classroom. Lack of teaching and learning resources for teachers and learners was another challenge which faced them. The teacher-learner ratio in the classroom was unfavorable. Classrooms were overcrowded with learners, and this brought challenges for teachers to teach as well as to control discipline of learners especially for those who were source for noise making.

The use of 'Teachers for All' DVD materials in the study for an intervention to the teachers had brought very encouraging positive results. Teachers had been seen to improve well their facilitation of learning to learners with disabilities in their classroom by employing various strategies and techniques than the previous findings which were obtained before intervention. It may be possible that the materials had stimulated, imparted and shed new lights for teachers' understanding of how to manage and teach learners with disabilities in inclusive classroom. The study reveals that after intervention teachers were more confident, they made a mult-use of teaching strategies in involving, encouraging, motivating, eliciting responses, and makes learners participate and interacts with the teacher. The findings also showed that after intervention, the teacher-learner interaction, and learner-learner interaction increased and was more improved in comparison to the findings obtained before intervention.

Despite of the encouraging results obtained after the use of the 'Teachers for All' DVD materials; the study reveals the importance of seminar or short courses for in-service teachers who teach learners with disabilities either in inclusive classroom or in a regular classroom. This may help to adds new knowledge, skills and improve their competencies in teaching for learners with disabilities. Moreover, teachers should be provided with the curriculum which is flexible, as well as teaching and learning resources for smooth facilitation of learning to learners with disabilities in inclusive classroom.

Where possible, researchers are invited to make more studies on various instructional strategies with intention of improving teachers' knowledge, skills and competencies in facilitating learning to learners with disabilities either in inclusive classroom or regular classroom which had learners with disabilities.

5.4 RECOMMENDATIONS

In the light of the findings obtained from those four cases, it is evident that certain changes has to be made as a means to improve teachers' facilitation of learning, and widening an opportunity for learners with and without disabilities to benefit in inclusive classroom. The following recommendations could be taken into consideration.

Teachers had been found to lack some training knowledge, and skills in special needs education. It is recommended that the government should strengthens the training and empowering regular teachers who teach in inclusive classroom to enable them acquiring

important knowledge and skills in facilitating learning to learners with disabilities in inclusive classroom.

It is further recommended that if possible, the government could introduce special needs education course (basic introductory courses) for teachers' trainees in teachers college (both level-Diploma and Certificate in teacher education) so as to enable student teachers to be imparted and equipped with enough knowledge and skills in facilitating learning for learners with disabilities in their schools which they will be posted to teach.

There is a need for the institute of curriculum development or curriculum developers to develop and design flexible curriculum content which could allow teachers to give more additional time for facilitation or instructional support to learners with disabilities. Similarly, teachers should be provided with instructional and curriculum materials relevant for adaption of different individual needs of the learners.

There is also a need for regular provision of seminars and short courses about special needs education for in-service teachers who teach in inclusive classroom without getting basic training in special needs education.

The study found that 'Teachers for All' DVD material was very potential and useful for teachers who participated in the study. Although it may depends on its availability, it is recommended that if possible, the training for student teachers in teacher education courses either in-service teachers or pre-service teachers should be exposed, watch and use these materials in their discussions or assignments so as to enable them acquire relevant knowledge and skills in understanding, managing and teaching learners with disabilities in inclusive classroom. This could be done in both levels of teacher education such as Certificate, Diploma, and Bachelor in education.

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APPENDIX 1: INTRODUCTORY LETTER



UNIVERSITY
OF OSLO

Department of Special Needs Education

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Your ref:
Our ref: 08/09 ST/db
Contact person: Denese Brittain d.a.brittain@isp.uio.no

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Date: June 8. 2009

Telephone: + 47 22 85 80 59
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FACULTY OF EDUCATION

TO WHOM IT MAY CONCERN:

This is to certify that **NGONYANI, Mussa**, date of birth 08.03.1979, is a full-time student pursuing a course of study at the Department of Special Needs Education at the University of Oslo, Norway, leading to the degree of Master of Philosophy in Special Needs Education (M. Phil. SNE).

This is a continuous two-year programme run on the "sandwich" principle, which involves periods of study and field work/research in both Norway and the home country. The student is currently in the second semester of the initial study period in Norway and will be working on the collection of data and the writing of a thesis during the autumn semester 2009. This involves a period of field work in Tanzania from 1 July to 31 December 2009. The student will then return to Norway for the final part of the degree. The period of study will be completed at the end of May 2010.

The main responsibility for supervising the research, developmental work and thesis remains with the Department of Special Needs Education, University of Oslo, Norway. However, we would kindly request that the relevant authorities give the student the access required to the schools and educational establishments necessary in order to undertake field work and research. We would also be most grateful for any assistance that is afforded to the student which enables him to carry out this work, particularly the use of facilities such as access to telephone, fax, e-mail, computer services and libraries at the various educational establishments.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Steinar Theie'.

Ass. Professor Steinar Theie
Academic Head of International Master's Programme
Department of Special Needs Education

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APPENDIX 2: A RESEARCH CLEARANCE

THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF EDUCATION AND VOCATIONAL TRAINING

Cable: "ELIMU" DAR ES SALAAM
Telex: 41742 Elimu Tz.
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Post Office Box 9121
DAR ES SALAAM

In reply please quote:

Ref. ED/EP/ERC/VOLII/ 104

Date: Tuesday, July, 28th 2009

The: Regional Administrative Secretary -Ruvuma

ATT. Regional Education Officer:

RE: RESEARCH CLEARANCE FOR MR. MUSSA NGONYANI:

The above-mentioned is a researcher from **Oslo University, in Norway** who conducted the research on the topic titled "**Interactive Teaching for Learners with Special Educational needs in Inclusive Classroom**"

The researcher needs to visit primary schools in Songea Municipal in Ruvuma region to collect information related to the research topic.

In line with the above information you are being requested to provide the needed assistance that will enable him to complete this task successfully.

The period by which this permission has been granted is from **17th August to 20th November, 2009.**

By copy of this letter, **Mr. Mussa Ngonyani** is required to submit a copy of the report (or part of it) to *the Permanent Secretary, Ministry of Education and Vocational Training* for documentation and reference.

Yours truly,

A handwritten signature in black ink, appearing to read 'Paulina J. Mkoma'.

Paulina J. Mkoma

For Permanent Secretary

CC **Mr. Mussa Ngonyani.**

APPENDIX 3: RESEARCH INSTRUMENTS-INTERVIEW GUIDE.

A: AN INTRODUCTION TO THE INFORMANT

My name is Mussa Ngonyani; currently I am a student at University of Oslo, in Norway studying a Master of philosophy in Special Needs Education. I am conducting the study which has the purpose of examining how teachers teach in inclusive classroom, with a focus to inclusion of learners with disabilities or special educational needs. The effect of using DVD material entitled “Teachers for All” will also be investigated.

I wish to ask you some question relating to the area of my study, and know your opinions about disability and inclusive education specifically in the teachers’ use of interactive teaching methods which can make learners with disability or sprcial educational needs to be involved, interact and participate in learning in inclusive classroom.

Further, I would like to know some of the challenges that you’re facing in teaching in inclusive classroom. Please feel free to answer any question which I will ask you. Also feel free to ask me any question if you need a clarification. All the information that you will provide to me will be kept/treated confidentially. **Can we start?**

B: BACKGROUND QUESTIONS

1. Tell me briefly about your educational background.
2. How long have you been in teaching?
3. How long have you been teaching in inclusive classroom?
4. Have you attended any special training program before start teaching in inclusive classroom?
5. How is the education provided for learners with disabilities in your school?
6. How do you perceive when you hear the word inclusive education?
7. Is the concept of inclusive education practice common for teachers in this school?

8. What is your opinion about the idea of teaching learners with disability in inclusive classroom?

C: TEACHING METHOD QUESTIONS

9. How do you manage to teach learners with disabilities in your classroom?

10. When you're teaching, what strategies do you use to ensure that learners with disabilities are involved?

11. How do you use interactive teaching method in your class for learners with disabilities?

- i. Facilitate talk in the classroom.
- ii. Facilitate learners' contribution of ideas, exchange of ideas or views.
- iii. Teachers' facilitation of interactive learning among learners i.e work in groups.
- iv. Teachers' responses and formulation of questions to learners with disabilities.

12. In your opinion, tell me how interactive teaching should be practiced in inclusive classroom so as to make learners with disability to be involved and participate in learning?

D: QUESTIONS RELATING TO THE CHALLENGES

13. What challenges are you facing in using interactive teaching method for learners with disabilities?

14. The way you see those challenges which you had mentioned, tell me how do you think a teacher could do as a solution to it, and cope up with those challenges?

15. What is your opinion in using interactive teaching methods for learners with disabilities in inclusive classroom?

16. What do you think can be to the educational system as whole so as to improve the use of interactive teaching methods for learners with disabilities in inclusive classroom?

17. Is there anything which you would like to add or you want to talk more about this topic?

Thank you very much for taking your time off to participate in this interview. I wish to ask you some questions later if there would be anything that I would feel to ask about this topic or anything which I don't understand and need some clarification from you.