# TASK ANALYSIS ON THE SELF – HELP SKILLS

# OF MILDLY MENTALLY RETARDED CHILDREN

# IN KIVAYWA SPECIAL UNIT,

# MATETE DISTRICT, KENYA

A Thesis

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Master of Arts Education in Special Needs Education

By:

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## DECLARATION  A

"This thesis is my original work and has not been presented for a degree or any other academic award in any university or institution of learning."


STEPHEN M. ATSIAYA

Name and Signature of Candidate

17TH  OCTOBER  2012.

Date

## DECLARATION  B

"I confirm that the work reported in this thesis was carried out by the candidate under my supervision."

_____

Name and Signature of supervisor

_____

Date

# DEDICATION

Dedicated to the researcher's wife, Mrs. Alice Atsiaya, children, Britney, Sydney, Blessing   and Angel in their endeavors to explore the world of academia

# ACKNOWLEDGEMENT

# ABSTRACT

This study experimented on task analysis on the mildly mentally retarded children in Kivaywa Special Unit of Matete District, Kenya. The following were the objectives of this study: (1) to determine the profile of the learners as to age, gender, intelligence quotient and level of ability in self-help skills; (2) to determine the mean scores in the pre-test and post-test; (3) to determine the significant difference in the pre-test and post-test mean scores, between the male and female learners. The study employed an experimental approach using the quasi experimental design specifically the pre-test and post-test technique. A total of 26 mildly mentally retarded children were involved in the study and were selected through universal and purposive sampling. The pre-test and post-test scores were documented in researcher devised observation sheet utilized as the research instrument. The statistical parameters used were the frequency and percentage distribution for the profile of the children; the mean for the pre-test and post-test mean scores test and post-test mean scores. The post mean gain was computed by t-test. The findings of the study went as follows: The profile of the learner was that majority of them were in the bracket of 7-12 years old, majority were male with their intelligent quotient between 55-59. The post-test mean scores were higher as compared to the pre-test mean scores with a significant difference of +4.46, +5.11, and +6.39. There was a significance difference in the mean scores between female and male children in the pre-test and post test. It was concluded in study that the hypothesis of no significant difference in the pre-test and post-test mean scores of mildly mentally retarded children was rejected. Therefore, task analysis was effective on the self-help skills of the learners. Based on the findings of this study, the recommendations are as follows: the Ministry of Education should equip teachers handling mildly mentally retarded 'earners with the necessary skills and expertise on task analysis so as to teach effectively self-help skills; the government of Kenya to sensitize the public on importance of taking children with mild mental retardation to school; future researchers may embark on another research in a different environment and exploit other techniques of teaching mildly mentally retarded learners on topics in the future such as Work Domain Analysis for the Mentally Retarded Children and Conservation Tasks for Mentally Retarded Children.

# ACRONYMS

**EFA -** Education for All

**IQ** - Intelligence Quotient

**IEP** - Individualized Educational Program

**MR** - Mentally Retardation

**KISE** - Kenya Institute of Special Education

# LIST OF TABLES

# CHAPTER ONE

# THE PROBLEM AND ITS SCOPE

## Background of the Study

Teachers have taught when pupils have learnt.  The Education of children  with Special Needs has been  characterized with  many challenges globally  and Nationally.  There has   been a deliberate effort   made to address these problems through various declarations and conferences.   The world as such is getting enlightened.  World  conference like the famous Jomtein in Thailand is an example in mind.

World  inclusive  conference  in Jomtein in 1990  and  the Salamanca  of 1994 have advocated  for Education  For All  Irrespective   of  gender or  any  other  form of disability.  On     the National Scene, there have been     various     Educational Commissions and reports.  Ngala  of  1976m  the   Koech   report   of  1999,  the Children's  Act  of 2001 and above all the newly promulgated constitution lay a lot of emphasis  on  rights  of All Children to Education.  They have stressed on teachers to be equipped with new skills to handle all learners   in    their regular schools.  As such the government has embarked on training teachers to handle children with diverse needs.

In   Matete District, found  in Kakamega county, there  are  a number of Special Units catering for children with Mental Retardation.  Few  teachers are  picking up  the initiative  to  train  so  as   to  handle  children  with mental retardation - majority  of teachers  lack   the  relevant  skills  and  therefore   neglect  such  learners  who need  skills  like  task  analysis  to  perform  self-help  skills.

This makes them have low self-esteem hence withdraw and as such seen as incapable of performing any self help tasks and other academic tasks. This will eventually lead to school drop out. At Kivaywa Primary hosting the special unit for the mildly retarded learners, there is only one teacher handling these learners.

## Statement of the Problem

Children with mild mental retardation are educable and can benefit from the regular school programmes Mohaparton 1995. The most efficient way of achieving this goal is by employing the task analysis approach among the Mentally Retarded Children. Ndurumo (1993) says that about 82% of the regular school teachers feel that children with mental retardation can not be in schools. This negative attitude has pushed l earners with MR out of schools.

Children with Mild Mental Retardation generally have deficits in Self Skills. They do not perform them with ease just like the so called " normal " children Heward 1979. This agrees with Anne Price (2011) that such tasks need to be broken down into sub skills or steps for MR to realize success

There are a number of mildly mentally retarded learners in Kivaywa Primary. From available resources in the school, there are about 104 pupils in the school with Mild Mental Retardation out of 650 pupils in the school. This is about 16% many of the learners have been forced to repeat various classes and finally drop out of school.

This scenario is the same according to a survey carried out by Kenya Institute of Special Education (K.I.S.E) in 1990 to 1992. The teachers force them out of school though repetitions of various class levels. They lack best skills to handle them.

Learners with mental retardation can be able to perform self help skills when tasks have been analyzed. If this is not done, then a bad precedent will be set. It is therefore prudent to analyze tasks in self-help skills so as to realize

2

achievement.

## Purposes of the study

This study was conceived with the following reasons:

1. to test the hypothesis of no significance differences between the pre-test and post-test of the learners.
2. to validate the theory to which this study was based.
3. to generate new information from the existing body of knowledge regarding task analysis and self-help skills.
4. to bridge the gaps identified from the previous literature and related studies.

## Research Objectives

**General:** To investigate on the effect of task analysis on the self-help skills of mildly mentally retarded children in Kivaywa Special unit in Matete District of Kenya.

**Specific:** this study sought to

1. determine the profile of the mildly mentally retarded learners as to age, gender, intelligent quotient and level of ability in self-help skills.
2. determine the mean scores of mildly mentally retarded learners in the pre-test and post-test.
3. establish if there is a significant difference in the pre-test and post-test mean scores and mean gain between the male and female of the mildly mentally retarded learners.

## Research Questions

1. What is the profile of the mildly mentally retarded learners as to: age, gender, intelligent quotient and Level of ability in self-help skills?

2. What is the mean score of mildly mentally retarded Learners in

pre-test and post-test?

3. Is there a significant difference in the pre-test and post-test mean scores and mean gain of mildly mentally retarded learners in the pre-test and post-test?.

Null Hypothesis

There is no significant difference in the pre-test and post-test mean scores between the male and female of the mildly mentally retarded learners

## SCOPE

### *Geographical scope*

This study was conducted in Kivaywa Special Unit for the mentally handicapped.

Kivaywa Special Unit for the mentally handicapped is located within Kivaywa Primary School which is found along Webuye-Kakamega main road. It is within Matete District of kakamega County in Kenya.

Kivaywa primary is I km from Matete District headquarters and located mostly in an area where sugarcane is grown and sweet potatoes. Most of the inhabitants of the area are peasant farmers. The school has inadequate classrooms.

The school has eight rooms for regular students from classes 1 to 8. It has also one room for the Mentally Retarded class. The school has a barbed fence round its 3acre farm with one main gate on the North. People driving in can easily enter.

The classroom for the Mentally Retarded is located to the North of the Compound near the gate. It ha s one wooden door and four wooden windows. It is well ventilated with two transparent iron sheets for easy visibility in the classroom. The classroom has three teachers, and thirty students. It has 10desks, two chairs, a table and a cupboard for storing learning materials

It has one portable blackboard and the door way has a ramp for easy

entrance. The school has enough and well dined playground for outdoor activities like ball games. It also has trees for resting and relaxation of learners. The school is well spaced.

All the learners are day -scholars for the school does not have boarding facilities. All the mentally retarded are brought by their parents every morning and received by their teacher to be assigned tasks for the day. This study will be conducted in the month of September, 2011 to November, 2011.

### Theoretical Scope

This study was based on Piaget's theory of thinking or information processing task analysis which is related to concrete operational thinking also known as conservation task. This postulates that children with intellectual disabilities need to be evaluated and see what levels they are on and go to broad stages of task performance by breaking them down.

### Content Scope

The independent variable in this study was task analysis and the dependent variable was self-help skills of the mildly mentally retarded learners. Other variables were as follows: profile of the learners as to age, gender, intelligence, quotient and level of ability: mean scores in the pre-test and post-test, post-tests mean gain.

### Time Scope

The study was done for three sessions within a period of three months ( September, 2011 - November, 2011).

## Significance of the Study

Task analysis entails breaking tasks into manageable bits from simple to complex ones. If not well executed, the mildly mentally retarded will not benefit from any form of learning. Therefore, all stakeholders in Education of these children should be encouraged and be supported to have the child perform the tasks with minimal problems.

The study will be conducted in the hope that the findings will create a positive impact on the following:

**The mildly Mentally Retarded learners** will realize their potential in performing tasks and achieve self-independence in all aspects of activities of Daily Living. They will be able to secure a place in the job market and compete favourably.

**The mildly Retarded learners' families** would be made aware that their support is essential in educating the mildly retarded children. They will appreciate the children's unique needs as they will realize that they can fit in the regular schools and be catered for. Thus, they will provide for them in regard to their needs without feeling that it is a waste of time and money.

**The teachers** will change their attitudes and look at each learner with unique needs and hence evaluate them as individuals and not as a whole class. They will then change their methodology of teaching and attend to individual needs of the learners.

**The community** will change their perception of the mildly retarded learners that they cannot perform. They will then provide them with physical facilities like desks, classrooms and toilets.

**The Government of Kenya** will provide infrastructure to cater for children with mental retardation. It will train more personnel and teachers to handle children with Mental Retardation. It will also provide job opportunities for these children. Ultimately, then it will achieve the national goals of Education i.e. *Education For All.*

The future **Researchers** research findings   will   form   a basis for   future researches  to investigate more on this study

## Operational Definitions of Key Terms

For the purpose of  this  study,  the following  terms are operationally defined:

**Mildly Mentally Retarded Children**  are  those  learners  with  sub-average  mental function  that  is  not  so  severe compared to those of the same age group.

**Pre-Test mean scores**  are the average mean score obtained  from  learners  before intervention or treatment.

**Post-test** mean scores  refer  to  the average mean scores  obtained  from  learners after  treatment  or intervention

**Post-test mean gain** is obtained through companion of means cores of pre-test and post-test

**Self-help Skills** refers to activities  of daily living  which  include dressing, eating, toileting and  bathing. In this study, the self-help skills are measured in terms of pre-test scores  and  post-test scores  which  are  computed  through  the  summation  of  the pre-test scores in the three sessions divided by the number of times the pre-test was done.

**Post-test scores and Pre-test scores** are  computed   through the summation of the pre-test score and post test  in  the 3  sessions  divided by the number of times the pretest and post test were done.

**Task Analysis**   refers to breaking down of activities into manageable  ones from simple to complex

# CHAPTER TWO

# REVIEW OF RELATED LITERATURE

## Concepts, Ideas and Opinions of Authors/Experts

### Task analysis

Mental retardation (MR) as significantly sub-average intellectual functioning resulting in or associated with concurrent impairment in adaptive behavior that are manifested during developmental period, Meyen 1974. These children are categorized into three groups namely, mildly , moderate and severely mentally retarded. All these groups are able to learn if collective adjustments or modifications are made in the learning process.

Mohapatra (1995) further puts it that it is usually difficult to recognize mildly, mentally retarded children at pre-school level. They have problems in daily living skills, otherwise known as self-help skills. He agrees with Piaget theory of information processing task analysis that careful observations on the part of the teachers are needed on repetition and breaking of tasks into simpler bits is essential to realize success Mohapotra 1995 argues.

Nicholas (1993) agrees and confirms that when teachers are planning For their learners, they should consider their learning characteristics like level of ability, intelligence, quotient and their age. He agrees with Fuentes (1998) that young children with different ages learn skills at different rates.


Those children in self-help skills usually need training in daily living skills in simplified steps from the beginning of their lives. This study agrees with Piagets theory that constant repetition and assistance in developing Daily living skills Maztropierm, and Scruggs .E,( 2003) asserts.

Children with mental retardation can learn and perform self help skills well when teachers handling them value the little skills they already have and in bits build on to teach complex ones. They should also value all that learners with MR are able to

achieve. The two thus agree with the theory of task analysis in performing self help skills. This agrees with Piaget theory of task analysis. Teachers should reward students who have completed tasks given to them. Nothing should go unrecognized however minor it is. The teacher must be patient and respect for human need and love for such learners. In line with Piaget theory of task analysis on information processing, Barbra (sun,02/07/2010) says that task analysis of self help skills is one of the most important behavioural ideas when it comes to teaching skills to children with mental retardation The main concept is that of breaking the skills down into all of its component pieces and then teach one piece at a time in a chain, until the entire chain is mastered. Each step of the skill learning is to be rewarded.

## A. Self-help skills

Heward L. (1979) further agrees with other authors that Children with mental retardations can perform tasks on self help skills when appropriate instructional programming that they are able to carry out activities one step after the other. The teachers are therefore required to make necessary adjustments in their individual instructions.

This can be done through an individualized Educational programme (I.E.P). This study agrees with Debbie Tipton (2002) states that a Mentally Retarded child should not be expected to wait with their questions. Their learning of self help skills must be immediate and spontaneous. A disabled child must practice even minor tasks before they can do them well

For example, Barbra (2010) opines that for self-help skill like toilet training, would make a list of all the steps that has to be made e.g. go into the bathroom, pull down pants, sit on the potty, use the potty, wipe, stand up, pull up pants, and wash hands. At first you must guide a mentally retarded child through each step. After which the child can be allowed to do it independently.

Jeffrey Donaldson (2009) agrees with other writers when he says children with

mental retardation and autism often have difficulty learning all steps of this procedure. They have to be taught one step at a time. For example during washing, they need to know how to turn water on and off, how to control water temperature and then complete the procedure of washing hands. This task analyzed sequence is essentially for mentally retarded children in undertaking self help skills

Anne Price ( 20ll) copyright, some of the basic life skills special needs children require for living independently and productive lives include daily living skills ( Self - Help skills ), social, personal and occupational skills. Self - help skills include grooming, table manners, buttoning, toileting, zipping, shoe lacing, washing, brushing, cooking and others,. These kinds of skills can be taught by teachers and even parents. The activities should be done carefully through pre-requisite skills, sub-skills and step by step analysis of tasks.

This is an important aspect for children with mental retardation and cannot be discounted. Everything small in children with mental retardation means a lot. Tasks must be broken down into manageable bits for them to accomplish. The report Basile (195) affirmed that where boys and girls start their education is the kindergarten on the same footing, boys are lower on mastering of the self-help skills and have to be taken through bits by bits.

## Theoretical Perspectives

This study was guided by the thinking or information processing Task Analysis developed by Jean Piaget. The theory examines how children work with very particular processes like working

memory, in order to trace development without overreaching broad stages as developed using research with mentally handicapped children.

Most kids with developmental delays and intellectual disabilities need to be evaluated and see what level they are on and then go from there.

The task analysis theory by Piaget points out that it is much harder to explain the multiple dimensions than putting out the tasks in more steps and not seeing

everything means you have to keep more in mind. This is called working memory. It is not about a kind of thinking but about qualities of the task. It is a Piagetian formal operations task because the physically - apparent concrete operations are taken and made to obstruct. ( K. H. Godoman 2003 ).As adapted in this study information processing, task analysis theory holds that a task has to be broken down into chunks because after a time, they become like second nature.

The students are often expected to be able to figure out the steps involved in completing a task. But with special needs population, where you might have children with processing disorders or difficulty with organization, it is necessary to take time to express the different parts of a task until the student has mastered each one.

However in adapting the information processing task analysis theory, the researcher is not ignorant of its short comings. The inter-relationships among the various parts of a whole task have to be recognized and understood by all people involved in service provision to children with Mental Retardation. All these people have to be informed about the need to be patient as tasks are broken into simple steps and repeatedly done for such learners.

## Related Studies

Three autistic, mentally retarded children, ranging in age from 4 to 11 years and a six-year old mentally retarded girl, were taught various adaptive behaviuors using a multiple baseline design according to Donaldson (2009). Skills taught were shoe tying, tooth brushing, hair combing, putting on pants, shirt and socks, eating and drinking. Training included modeling, verbal instruction, prompting, edible and social reinforcement.

**Treatment procedures help skills and consisted of three phases:**

(i) the trainer modeled and verbally described the target behaviour;

(ii) the trainer physically and verbally guided the child through the entire sequence of task analyzed steps and (iii) the child was instructed to perform the behaviour independently Jeffrey Donaldson, (2009 )

The amazing results showed that where the trainer physically and verbally guided the child through the entire sequence of task analyzed steps, the skills were well followed and mastered. Task analysis is a process by which tasks are broken down into its component parts. Everyone uses task analysis at some point, even if it is unconsciously.

Damodar (1995) firmly agrees with Anno Price (2011) in their research that Mentally Retarded learners should not be compelled to learn more than one skill at a time. The same concept should be presented before them in a variety of settings with a view of facilitating the transfer of training. This agrees with information processing theory of task analysis of Piaget when he says, the whole teaching unit should be presented before children in small and sequential steps to achieve better results. Learners will not be able to exhibit performance of the self help skills if the tasks are given in big chunks.

Mwaura (2002) I n his investigation found out that teachers handling mentally retarded children should put in place an individualized Education Programme ( I.E.P ) so as to cater for them. Each learner will be viewed as a unique individual. They should then design tasks to meet their individual needs. The tasks are to be split into manageable bits from simple to complex ones. In so doing learners with MR will realize success. He says further that such learners can only be taught self help skills to live an independent life. This skills should be split into bits so as to be taught.

Spraque, J. (1994) reported to agree with Mwaura (2002) that learners with mild mental metardation can be taught well the self-help skills when their teachers provide efficient instructions that take into account tasks that are broken down into smaller steps. In so doing, the learners get to perform a whole task with minimal difficulties. He argues further to say that such ask management can be through Individualized education Programmes. Therefore, learners with mild mental retardation will be able to perform activities of daily living otherwise known as self-help skills.

Nancy, G. ( 1995 ) in her research is of the view that the smartest boy in class will probably not end up the richest. She argues that it is of paramount importance that children with Mental Retardation be taught skills of Daily living. This should be done in a systematic way from the simplest steps to the most complex. The tasks must be analyzed to be comprehended by such learners.

Bullman and Wortman (1997) in a follow up on self-help skills investigation suggested that children with Mental Retardation learn more slowly than a typical child. Children may take longer to learn language, develop social skills and take care of their personal needs such as dressing or eating. Learning will take boys longer time, require more repetitions and skills than girls and may need to be adapted to their learning level. They however, in agreement reported that every child is able to learn, develop and become a participating member of the community.

Chen, D.Friedman and Calvello (1989) in learning together, asked whether mentally retarded children can learn self-help skill independently. They agree in their report with Anne Price (2011) that such children can only learn self-help skills if they are broken down into simpler and manageable bits. If they are given large chunks of tasks to perform, they may not perform to the expected levels. They observed that we must start with pre-requisite skills and sub-skills that is directing the task into individual steps and then asking; Does this child have the skills to do each step? If this is taken into consideration, they will master these skills.

Merril Prentice Hall (2004) in their study suggests that to teach the mentally retarded children / self-help skills teachers of these children should employ task analysis through the use of an Individualized Educational Programme ( I. E. P ). Here priority should be given to the self-help skills like daily care, bathing, teeth brushing, bathing, lacing and socializing with others, teachers should gather information needed to complete a task or activity and solve problems. In developing I. E. Ps for self-Help skills children will be taught in steps, and bits by bits thereby perform the tasks well. The learners will be viewed as unique individuals with unique needs

**Summery of Gaps to be bridged by this study**

1. Previous studies concentrated only on task analysis specifically toilet training, hand washing, table manners and cooking but in this study, task analysis covers buttoning, shoe lacing, eating and toileting and relating its effect on self-help skills.

2. Authors like Bullman and Wortman studied on self-help skills only but did not consider the variable of task analysis which is evident in this study.

# CHAPTER THREE

# METHODOLOGY

## Research Design

This study employed the quasi experimental design specifically the pre-test and post-test technique. The quasai experimental design has a characteristic features: manipulation (cause variable) and randomization. The manipulation in this study is the task analysis. Randomization means unbiased selection of the mildly mentally retarded learners in this study.

The pre - test was given before the task analysis and post – test was administered after. The same set of questions were given in the pre-test and post-test.

## Research population

### Target population

This study included a target population of 26 mildly mentally retarded learners in the Special Unit of Kivaywa Primary School in Matete District in Kenya.

### Sample Size

The minimum sample size was no longer computed / determined since all the learners were taken as participants of the study.

### Sampling Procedures

The universal and purposive sampling was utilized to select the learners. The following inclusion and were employed:

## A. Inclusion

The learners are

1. Of I. Q 55 - 70 mildly mentally retarded category

2. either male or female

3. ages from 5 years to 16 year

## Research Instruments

The researcher employed a researcher devised observation checklist. The observation sheet had the following categories: session, child's number, age, gender, intellectual quotient and level of ability. The pre-test and post-test scores were recorded on this sheet.

### Validity and Reliability of the Instrument

The research instruments utilized was a researcher devised observation check list. The information was recorded as it occurred.

This observation check list was tested on actual experimentation. The researcher did not find any flaws or gaps in this checklist.

## Data Gathering procedures

### Before data gathering

1. The researcher obtained an introduction letter from the College of Higher Degrees and Research (CHDR) addressed to the Principal of Kivaywa Primary School.

2. The researcher solicited permission from the principal of Kivaywa Primary School to carry out the study.

3. The teachers were informed as well as the learners of the Special Unit about the study.

### During data gathering

1. The experimentation details of table 1 page 26 was followed strictly

2. The pre-test and post-tests were conducted and scores were recorded as accurately as possible by the researcher.

### After data gathering

1. The pre-tests and post-tests were organized and subjected to statistical analysis in answer to the specific objectives.

2. The tables were constructed and the relevant data were reflected.

## Data Analysis

To determine the profile of the mildly mentally retarded learners in terms of age, gender, intelligent, quotation and category and level of ability in self help skills the frequency and percentage distribution used.

The mean was used for the computation of the mean scores, while the t-test for the computation of significant difference. The post-test mean gain was also computed using the t-test.

## Ethical Considerations

Ethics was practical in this study as stated below:

The researcher obtained an introduction letter from the CHRD to carry out the study. Permission was also sought from the head teacher before experimentation. The researcher assured the head teacher of confidentiality and that the study was not was meant for academic purpose only. The participants were assigned code numbers in the list to ensure anonymity.

Authors cited in this study were acknowledged through citations and referencing. The findings were presented in a generalized manner.

## Limitations of the Study

Variables intervening in the findings of the study and beyond the researchers control was the scarcity of the cases in the Special Unit where there were only very few mildly mentally retarded children to be included in the study hence randomization was not done (threat to validity: selection) and universal sampling employed.

# CHAPTER FOUR

# PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter presents the data, statistical analysis in  tables and interpretation of the data after the tables.

## Profile of the Learners

Table 1 reflects the profile of the learners  where  the ages range from   4-19  years with majority of  them being  between  7-12  years with 57%.  The male learners are greater in number:  Many  learners are of the  I.Q  ranging  between  55-59  with majority  having  very poor ability  in  the  range  of  1  with a percentage  of  69.23%

## Table 1

## Profile of the Learners

## Number = 26

| MAJOR CATEGORY | SUB-CATEGORY | | | | | |
|---|---|---|---|---|---|---|
| | | FREQUENCY | | PERCENTAGE% | | |
| CLASS | | 26 | | 100 | | total |
| Age | 4 – 6 | 3 | 2 | 11. 54 | 7.69 | 19.23 |
| | 7 – 12 | 7 | 8 | 26.92 | 30.97 | 57.69 |
| | 13 - 19 | 4 | 2 | 15.38 | 7.69 | 23.07 |
| Total | | 14 | 12 | 53.84 | 46.15 | |
| gender | female | 12 | | 46.15 | | |
| | male | 24 | | 53.85 | | |
| Total | | 26 | | 100 | | |
| I.Q | 55 – 59 | 10 | | 38.46 | | |
| | 60 – 64 | 9 | | 34.62 | | |
| | 64 – 69 | | | | | |
| | | 7 | | 26.92 | | |
| Total | | 26 | | 100 | | |
| Ability | 4 | -- | | -- | | |
| | 3 | 2 | | 7.69 | | |
| | 2 | | | | | |
| | 1 | 6 | | 23.08 | | |
| | | 18 | | 69.23 | | |
| Total | | 26 | | 100 | | |

Source: primary Data

18

Legend for I.Q
4 = Very Good          3 = Good          2 =Fair          1 = Poor

The overall picture in Table 1 shows the following: the male learners were slightly more in number than the female with 53.85% and 46.15% respectively. Among the total number of mildly retarded learners which is 26 children, majority of them are between age 7 - 12 years with very few between ages 4 - 6 years. Those of age ranging between 13 - 19 years are 23.08% lightly more than 6-6 years old. Most of the learners in the unit haveI.Q between 55-59, hence, more than half have their level of ability that is poor (69.23%).

Table 1 obviously shows variations in terms of age, gender, intelligent quotient and their level of ability. These findings are consistent with Nichols (1993) who asserts that a teacher should plan his/her lesson in such a way that consideration is made on the learners characteristics; level of ability, intelligence quotient and his or her age level. To achieve their objectives, teachers should consider variations in terms of age, gender and their level of ability as Fuentes (1998) puts forward. This will enable teachers to break down tasks to suit individual learners.

Whereas girls and boys start kindergarten at the same level, Basles's report (1995) affirmed that boys are generally in lower ability level than their male counterparts when it comes to self-help skills.


## Mean Scores in the Pre-test and Post-test of Mildly Mentally Retarded Learners

The mean scores in the pre-test and post-test of the Mentally Retarded learners are shown in Table 2.

The researcher obtained the mean scores after administering pre-test and post-test examination for all 26 learners for three sessions the pre test mean scores of the three session are (17.42, 20.88, 29.88) respectively had lower mean scores compared to post-test mean scores in three sessions (20.4, 27.05, 34.99)

# Table 2

## Mean Scores in pre-test and Post-test for the Self-Help Skills

| | Pre-test 1 mean | | | Post -test 1 mean | | | Pre-test 2 mean | | | Post-test 2 mean | | | Pre- test 3 mean | | | Post- test 3 mean | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T | M | F | T |
| ing | 9.40 | 11.02 | 20.42 | 14.20 | 14.21 | 28.41 | 14.88 | 15.24 | 30.12 | 16.12 | 18.12 | 34.24 | 18.02 | 18.12 | 36.14 | 20.76 | 21.46 | 42.22 |
| cing | 8.12 | 10.28 | 18.40 | 12.10 | 10.14 | 22.24 | 12.01 | 12.11 | 24.12 | 16.46 | 16.00 | 32.46 | 18.94 | 19.28 | 38.22 | 20.3 | 26.12 | 48.42 |
| | 11.89 | 12.22 | 24.11 | 12.74 | 13.44 | 26.18 | 14.31 | 14.11 | 28.42 | 14.40 | 15.72 | 30.12 | 17.11 | 17.77 | 34.88 | 19.22 | 20.96 | 40.18 |
| 1g | 8.42 | 15.76 | 24.18 | 9.36 | 15.84 | 25.17 | 10.91 | 10.84 | 21.75 | 18.94 | 19.5 | 38.44 | 18.92 | 21.22 | 40.14 | 20.2 | 23.92 | 44.12 |
| | 37.83 | 49.28 | 87.11 | 48.37 | 53.63 | 102 | 52.11 | 52.30 | 104.41 | 65.83 | 6943 | 135.26 | 72.99 | 76.39 | 149.38 | 82.48 | 92.44 | 174.94 |
| e | 17.42 | | | 20.40 | | | 20.88 | | | 27.05 | | | 29.88 | | | 34.99 | | |

The trend in Table 2 reveals that there was an increase in the post-test mean scores for all the self-help skills. It further reveals that the mean scores of subsequent pre-test after the initial pre-test mean score is of higher margin; Pre-test 1, 7.42, pre-test 2, 20.88, and pre-test 3, 29.88. The overall picture however is that the post-test scores are much higher than the pre-test scores. This reveals that when tasks are analyzed and broken down into manageable ctivities, the mildly mentally retarded learners will be able to undertake them. Heward L. (1978) confirmed that children with mental retardation can learn and perform tasks on self-help skills when appropriate instructional programming is put in place so that they are able to carry

out activities one step after the other. There is further revelation from Table 2 that female performance in self-help skills was slightly higher than the male performance (37.83 and 49.28, 48.37 and 53.63m 52.11 and 52.3, 65.83 and 69.43, 72.99 and 76.39, 82.49 and 92.46). This confirms with Bullman and Wortman (1997) in their investigation that boys take longer time and more repetitions to learn self help skills.

## Significant Difference in the Mean Score of Mildly Mentally Retarded Learners in the Pre-test and Post-test

Worth noting, in Table 3 are the mean scores in the pre test and post test constantly increasing and where there were significant differences in the mean scores between the male and female learners.

### Table 3
### Significant Difference in the Mean Scores of Mildly Mentally Retarded Learners in the Pretest and Post-Test.

| Category | Computed t-value | Critical t-value | Interpretation of Difference | Decision on Ho |
|---|---|---|---|---|
| Test 1 | | | | |
| Pre Vs Post | 3.785 | 0.100 | No Significant difference | Reject |
| | | | | |
| Test 2 | | | | |
| Pre Vs Post | 2.490 | 0.166 | No Significant difference | Reject |
| | | | | |
| Test 3 | | | | |
| Pre Vs Post | 11.132 | 0.016 | Significantly different | Accept |
| | | | | |
| Between Tests | | | | |
| Test 1 Vs Test 2 Vs Test 3 | 1.719 | 0.238 | No Significant difference | Reject |

N.B. If the significant value is equal or less than 0.05 level of significance, the interpretation is **significant.** If the significant value is more than 0.05 level of significance, the interpretation is **not significant.**

There was a significant difference between pre-test 1 and post-test one with a computed t- value of 3.785 thus decision on $H_o$ rejected. In pre-test 2 and post test 2

there was also a significant difference with a computed t-value of 2.490. the same scenario in pre-test 3 and post test 3 with a computed t-value of 11.132.

These are overall mean scores of the four self-help skills. These results further have relevance with the contention of Anne Price (2011) that daily living skills / self-help skills are needed by mentally retarded learners. These skills should be taught by teachers through pre-requisite skills, sub-skills and step by step through task analysis. Mwaura (2002) also affirms and agrees with Merril Prentice Hall (2004) that mentally retarded children should be taught by use of Individualized Educational Programmes ( I. E P) where tasks are split into manageable bits to meet their individual needs. This should be from simple to complex ones as the tasks are analyzed.

Table 3, revealed that in all the self-help skills, there was a significance difference in the mean scores from test 1 to 3. This was after the tasks had been analyzed and taught in bits. Nancy, G. (1995) and also Bull man and Wortman (1997) contended that children with mental retardation should be taught self help skills in a systematic way from the simplest to the most complex. The tasks must be analyzed to be comprehended by such learners. This should be done repeatedly and that it may take them longer but finally they will master the skills.

# CHAPTER FIVE

## FINDINGS, CONCLUSIONS, RECOMMENDATIONS

In this chapter, the findings, conclusions and recommendations are presented.

## FINDINGS

The findings of this study were as follows

### A. Profile of the Respondents

1. Majority of the learners (57.69 %) in the unit were between

    7 - 12 years old ( early adolescent).

2. Fifty three point eight five percent of the learners in the unit

    were male children.

3. Majority ( 38.46 %) of the mildly mentally retarded learners

    in the unit were of the I.Q between 55 - 59

4. Majority of the mildly mentally retarded learners (69.23 %)

    in the unit were of poor ability in terms of self-help skills.


### B. Mean Scores in Pre-test and Post-test for the Self-Help Skills

There was a consistent increase in the post-test mean scores for the most of

the self-help skills. The mean scores of subsequent pre-test after

the initial pre-test was conspicuously of higher mean scores.

The post-test mean scores were markedly higher than the pretest mean

scores (17.42, 20.88, 29.88 ). The post-test mean scores were

marked higher than the pre-test mean scores (20.4, 27.05, 34.99)


### C. Significant Difference in the Mean Scores of Mildly Mentally Retarded Children in the Pre-test and Post-test

There was a significant difference in the pre-test and post-test

mean scores in the aspects of buttoning, shoe lacing, eating and

toileting.

## CONCLUSIONS

Based in the findings of the study, the following conclusions were drawn

There was a significant difference between the pre-test and post-test mean scores in terms of self-help skills between the male and female of mildly mentally retarded children there fore task analysis was effective on self help skills of both male and female learners.

The study proved Piaget's theory of information processing in task analysis where the mildly mentally retarded children performed tasks well in a systematic manner hence scored consistently increasing marks.

New information generated from this study appear to show that girls slightly perform self-help skills better than boys. This averts the stereo-type that female learners perform poorly in any given tasks. If tasks are well organized and given out in bits their performance is enhanced.

Various gaps had been bridged in this study. Previous studies had dwelt on self-help skills like hand washing, table manners, cooking and toileting without task analysis but in this study, task analysis was utilized to test the effect on self-help skills.

## RECOMMENDATIONS

The following are recommendations based on the findings of the study:

1. The government of Kenya through the Ministry of Education should sensitize the general public about the importance of taking their mentally retarded children to school. This should capture gender disparity.

2. Teachers should employ the technique of task analysis in teaching their mildly mentally retarded learners to realize success in mastering the self-help skills.

3. The Ministry of Education should mount workshops and seminars to equip teachers and head teachers on new skills like task analysis to handle mentally retarded children in their schools.

4. Future researchers may embark on another research in different environment and exploit other techniques of teaching mildly mentally retarded learners. They may research on the following topics in the future.

    4.1: Work Domain Analysis for the Mentally Retarded Children.

    4.2: Conservation Task for the Mentally Retarded Learners.

Jeffrey Donaldson (2009). Task Analysis of Hand washing. Acts by Google.

Mastropieris. M and Scruggs E. (2003), The Inclusive Classroom. Strategies for Effective Instructions. Syracuse's. New York.

Matson J.L et. Al (2008), Teaching Self-Help Skills to Autistic and Mentally Retarded Children. Louisiana State University, Baton Rouge

Merrill Prentice Hall (2004), Special Education in Today's Schools, Upper Sendle River, New Jersey.

Me yen L. (1974) Exceptional Children in today's schools. Winston mc Colardo, America.

Mwaura (2002) Introduction to Children with Special Needs, Kenya Institute of Special Education. Nairobi. Kenya.

Ndurumo M.(1993) Exceptional Children. Longman, Nairobi. Kenya.

Simon Sebastian (2007) Mental Retardation. The New York Times.

Nancy G (1995) The I Q Factor. Times Towers. New York.

Sprague J (1994). Adapting Curriculum and Instruction in inclusive Classrooms (7th Ed).

# APPENDIX I

# TRANSMITTAL LETTER

**KAMPALA INTERNATIONAL UNIVERSITY**

Ggaba Road - Kansanga
P.O. Box 20000, Kampala, Uganda
Tel: +256-41-266813 / +256-41-267634
Fax: +256-41-501974
E-mail: admin@kiu.ac.ug.
Website: www.kiu.ac.ug

### OFFICE OF THE CORDINATOR OF EDUCATION
### SCHOOL OF POSTGRADUATE STUDIES AND RESEARCH (SPGSR)

August19. 2011

Dear Sir/Madam,

### RE: REQUEST FOR STEPHEN MUGWANG'A ATSIAYA
### MSEN/ 13751/102/DF: TO CONDUCT RESEARCH IN YOUR ORGANIZATION

The above mentioned is a bonafide student of Kampala International University pursuing a Masters of Education In Special Needs Education.
He is currently conducting a field research of which the title is **"Task Analysis on the Self –Help Skills of Mildly Mentally Retarded Children in Kivaywa Special Unit Matete District, in Kenya."**

Your organization has been identified as a valuable source of information pertaining to his research project. The purpose of this letter is to request you to avail him with the pertinent information he may need.

Any information shared with him from your organization shall be treated with utmost confidentiality.

Any assistance rendered to him will be highly appreciated.

Yours truly,

Ms. Kyolaba Sarah
Coordinator Education, (SPGSR)

*"Exploring the Heights"*

# APPENDIX II

## CLEARANCE FROM ETHICS COMMITTEE

Date _____

**Candidate's Data** _____

Reg. No. _____

Course _____

Title of study _____

_____

**Ethical Review Checklist**

**The study reviewed considered the following:**

• physical Safety of Human Subjects

• Psychological Safety

• Emotional Security

• Privacy

• Written Request fro Author of Standardized Instrument

• Coding of Questionnaires / Anonymity / Confidentiality

• Permission to Conduct the Study

• Informed Consent

• Citations / Authors Recognized

**Results of Ethical Review**

• Approved

• Conditional    (To  provide  the   Ethics  Committee with corrections )

**Ethics Committee ( Name and Signature)**

    Chairperson _____

    Members  _____

# APPENDIX II1

## INFORMED CONSENT

I am giving my consent to be part of the research study of Ms. Caroline Chepkoech that will focus on the effectiveness of the teaching models on the comprehension in Mathematics.

I shall be assured of privacy, anonymity and confidentiality and that I will be given the option to refuse participation and right to withdraw my participation anytime.

I have been informed that the research is voluntary and that the results will be given to me if I ask for it.

Initials: _____

Date: _____

# APPENDIX IV

## OBSERVATION SHEET

**PROFILE OF THE RESPONDENTS**

**CODE:** ........................................................

**AGE:** ........................................................

**GENDER:   MALE:** .................................

**            FEMALE:** ................................

**I.Q:** ........................................................

**ABILITY LEVEL:** ......................................

| Student No | Session / Test No | Skills | Pre-test | Post-test |
|---|---|---|---|---|
| | 1 | Buttoning | | |
| | | Shoe lacing | | |
| | | Eating | | |
| | | Toileting | | |
| | 2 | Buttoning | | |
| | | Shoe lacing | | |
| | | Eating | | |
| | | Toileting | | |
| | 3 | Buttoning | | |
| | | Shoe lacing | | |
| | | Eating | | |
| | | Toileting | | |

# RESEARCHER'S CURRICULUM VITAE

To document the details of the researcher, his competence in writing a research and to recognize his efforts and qualifications, this part of research report is thus meant.

## PERSONAL PROFILE

**REG. No.**     MSEN / 13751 / 102 / DF

**AGE:**         41 YEARS

**GENDER:**      MALE

**ADDRESS:**     Box 96, MATETE. KENYA

**E.MAIL.**      *Atsiayastephen@yahoo.com*

## EDUCATION BACKGROUND

**UNIVERSITY:**  Kampala International University -  **Dec.  2006 - Dec. 2008**

Degree in Special Needs Education  -  **( 2ⁿᵈ Class Upper**

**Division )**

**COLLEGE:**     Kenya Institute of Special Education  -  **2003  -  2006**

Diploma in Special Needs Education  **( Credit )**

Shanzu Teachers College  **- 1990  -  1992**

P1 Certificate in Teaching

**SECONDAY:**    Lugari High School  -  **1986  -  1989**

( Mean Grade  C Plain )

K.  C.  P.  E  -  46  points

## WORK EXPERIENCE

Shitonyi Primary School:  **1990  -  1995**

Chepsai  Primary  School:  **1996  -  2006**

Kivaywa Primary School:  **2006  -  2007**

Kivaywa  SP. Unit:  **2007 to date**

## OTHER RELEVANT DATA

**MINISTRY OF EDUCATION:**   Strengthening Primary Education (STD) - **2001 - 2002**

### ( DISTINCTION )

**FUTURE PROSPECTS:**   To be able to secure a place in an organization where I can

participate   in making  and implementing  major decisions.

To undertake  a Ph.D course  in  Special  Needs  Education