AN ASSESSMENT OF THE EFFICIENCY IN THE PROVISION OF INCLUSIVE EDUCATION IN PUBLIC SECONDARY SCHOOLS IN RONGO DISTRICT, MIGORI COUNTY, KENYA

BY

LUCY AKINYI EUNICE

E55/CE/15556/2008

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTERS IN ECONOMICS OF EDUCATION, DEPARTMENT OF EDUCATIONAL MANAGEMENT, POLICY AND CURRICULUM STUDIES OF KENYATTA UNIVERSITY

KENYATTA UNIVERSITY LIBRARY

JUNE 2012
DECLARATION

I declare that this is my original work which has never been done by anybody from this university or from any other university.

Signature ........................................ Date ........................................

Lucy Akinyi Eunice

This research project has been submitted for consideration with our approval as University Supervisors.

Signature ........................................ Date ........................................

Dr. Norbet Ogeta
Lecturer,
Department of Educational Management,
Policy and Curriculum Studies, School of Education,
Kenyatta University.

Signature ........................................ Date ........................................

Dr. Andrew Riechi
Senior Lecturer,
Department of Educational Administration and Planning,
University of Nairobi.
DEDICATION

This work is dedicated to my family who stood by me in support both financially and spiritually to ensure that I sailed through. May the Almighty God bless them accordingly.
ACKNOWLEDGEMENT

This project would not have been completed without the Almighty God the sole provider of good health and knowledge and also the cooperation and contribution of many. Profound gratitude to Dr. Norbert Ogeta and Dr. Andrew Riechi my supervisors, special thanks to Schools where the project was undertaken. Thank you and may the almighty bound fully bless and protect you all.
ABSTRACT

The central problem of this study was to investigate and give an understanding of the situation on the ground about the efficiency in inclusive education at the secondary school level in Kenya. The objective of this study was to find out the approaches used in handling students with special needs in integrated regular classrooms to uncover the efficiency and effectiveness of the strategies used in teaching and to evaluate these strategies. The research adopted a case study of secondary schools in Rongo district and targeted all the 34 public secondary schools in the district. The sample consisted of 5 students with special educational needs per school. This is 10.0% of the target population. The study involved principal, teachers, students with special needs and an interview for the district education officer (DEO). Data was collected using interviews for the principals, questionnaires for the students with special needs and an interview for the education officer (DEO). Data collected was analyzed through the use of statistical package for social science (SPSS). Qualitative data was analyzed by arranging them according to the main objectives, research questions and after that inferences, conclusions and recommendations were drawn according to the research questions and objectives. The study established that school heads were facing major challenges in the implementation of inclusive designs, lack of text books for special education needs, inadequate funds and lack of trained teachers in the required special educational skills as teachers have not been trained on such skills. This has affected efficiency in the provision of inclusive education.
# TABLE OF CONTENT

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title page</td>
<td>i</td>
</tr>
<tr>
<td>Declaration</td>
<td>ii</td>
</tr>
<tr>
<td>Dedication</td>
<td>iii</td>
</tr>
<tr>
<td>Acknowledgement</td>
<td>iv</td>
</tr>
<tr>
<td>Abstract</td>
<td>v</td>
</tr>
<tr>
<td>Table of contents</td>
<td>vi</td>
</tr>
<tr>
<td>List of figures</td>
<td>ix</td>
</tr>
<tr>
<td>List of Tables</td>
<td>x</td>
</tr>
<tr>
<td>Abbreviations</td>
<td>xi</td>
</tr>
</tbody>
</table>

**CHAPTER ONE: INTRODUCTION**

1.1 Background Information ......................... 1  
1.2 Statement of the problem ......................... 5  
1.3 Purpose of the study ............................ 7  
1.4 Objectives of the study ......................... 7  
1.5 Research Questions ............................... 8  
1.6 Significance of the study ...................... 9  
1.7 Assumptions ...................................... 10  
1.8 Limitations ...................................... 10  
1.9 Delimitation .................................... 10  
1.10 Theoretical frame work ......................... 11  
1.11 Conceptual frame work ......................... 13  

vi
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND DISCUSSION.

4.1 Introduction .............................................................................................................41
4.2 Background data of the respondent .................................................................42
4.3 The enrolment trends of students with special educational needs in regular schools.43
4.4 Retention and completion rates of students with special educational needs ..........46
4.5 Readiness of teachers and students for inclusive education ..............................53
4.6 Training and deployment of teachers ....................................................................61
4.7 Possible policy strategies to address the factors hindering the provision of efficient inclusive education ..................................................................................................................61
4.8 Discussion ..............................................................................................................63

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction .............................................................................................................65
5.2 Summary of the study ............................................................................................65
5.2.1 Enrolment trends of students with special educational needs in regular schools ....66
5.2.2 The Retention and Completion rates of student with special educational needs....67
5.2.3 Resource availability to teachers and students for efficient teachers and learning process ........................................................................................................................................68
5.2.4 Teachers Training and Deployment .................................................................68
5.3 Conclusion ...............................................................................................................68
5.4 Recommendation ....................................................................................................70
5.5 Suggestions for further studies ...............................................................................71
REFERENCES ..............................................................................................................72
APPENDICES ........................................................................................................................................... 75
Appendix i. Letter of Introduction to the Principals ........................................................................... 75
Appendix ii. Interview scheduled for the principals ......................................................................... 76
Appendix iii. Interview schedule for the District Education Officer ......................................................... 79
Appendix iv. Questionnaire for the Students with Special Needs ....................................................... 81
Appendix v. Questionnaire for teachers .............................................................................................. 84
Appendix vi. Time Schedule ............................................................................................................... 89
Appendix vii. Research Budget ........................................................................................................... 90
LIST OF FIGURES

1.12 The conceptual framework ................................................................. 14
4.1 Coping strategies with low retention and graduation rates .................. 52
4.2 Teachers training on special needs education ................................. 54
LIST OF TABLES

Table 2.1 Number of Special Needs Education institutions ........................................... 20
Table 2.2 Number of special needs Institutions by province and Specialty .................. 21
Table 2.3 Enrolment in special needs Institutions by category 2003 – 2008 .................... 21
Table 3.1 Secondary Schools within Rongo District According to their Status ............. 33
Table 3.2 Table Population, Sample and Percentage .................................................. 35
Table 4.1 Teachers academic qualifications ............................................................... 42
Table 4.2 Enrolment trends of students with special educational needs in regular schools .......................................................... 43
Table 4.3 Problems faced during admission of students .............................................. 44
Table 4.4 Enrolment trends of students with special education needs in classrooms ....... 47
Table 4.5 Subjects offered in school ........................................................................ 55
Table 4.6 Problems related to the provision of inclusive education ............................. 58
Table 4.7 Deployments of teachers within Rongo District for inclusive education ...... 70
Table 4.8 Principals policy strategies to inclusive education ....................................... 62
Table 5.1 Enrolment Trends of Students with Special Education Needs ..................... 66
Table 5.2 Completion Rates of Students with Special Education Needs ....................... 67
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEO</td>
<td>District Education Officer</td>
</tr>
<tr>
<td>CDF</td>
<td>Constituency Development Fund</td>
</tr>
<tr>
<td>KCPE</td>
<td>Kenya Certificate Of Primary Education</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>UFPE</td>
<td>Universal Free Primary Education</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational Scientific And Cultural</td>
</tr>
<tr>
<td>SPSS</td>
<td>Statistical Package for Social Science</td>
</tr>
<tr>
<td>UFPE</td>
<td>Organization</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>ICT</td>
<td>Information Communication Technology</td>
</tr>
<tr>
<td>KISE</td>
<td>Kenya Institute of Special Education</td>
</tr>
</tbody>
</table>
CHAPTER 1

INTRODUCTION

This chapter gives a description of a situation on ground about Inclusive Education in Rongo District in Kenya. Since Inclusive Education is an emerging issue in Kenya which the government had been pushing for its implementation since 2002 as one of the Millennium Development Goals and Education for All policy, after realizing that majority of such students are not taken to special schools due to poverty in the country. This chapter hence describes the history of education of Children with special Educational needs, it also describes the problem on the ground making these children not to stay in school and complete their education and also seeks to determine the problems on the ground and give advice to the ministry of education on how best these children may be helped in their schooling process to completion which would be advisable to be replicated throughout the country as research findings is generalized to depict what happens in the whole country as rescue plot for Kenyan children with special needs.

1.1 Background Information

Inclusive education may be defined as a situation whereby students with special needs such as mental retardation, traumatic brain injury, hearing impairment/deafness, visual impairment/blindness, speech or language impairment, serious emotional disturbances, autism, special learning disabilities, health impairments and orthopedic impairment are integrated with their normal peer students in regular classroom (Farrell, 2001).

The government and other education stakeholders realized that when these children are isolated in their special schools, their problems were worsened as they could not cope
socially with the outside society ones released from school hence the need for inclusive education. The inclusive education is very much welcome by all but in the regular schools, things seem to be pathetic since the students with special needs are enrolled but seemingly the facilities to cater for their special needs are not looked into such as the deaf with the teachers who have studied sign language, the blind with Braille machines, talking calculators, the lame with the wheel chairs and other right infrastructural and instructional materials. This compromise the efficiency to which the inclusive education comes with; psychologist are needed in these schools also to attend to the emotionally, brain injured, mentally retarded students which may not have been in-serviced too in such areas.

These special needs students once enrolled in the regular schools of which their enrolment ratio is also very low, the schools cannot retain them and this is depicted in the low survival / retention rates. The inefficient teaching strategies and facilities at schools are depicted in the high repetition rates of these students and since that environment proves to be hostile after several repetitions, these students dropout of school as depicted in the high dropout rates and low graduation rates through observation, all these are indicators of an inefficient education system.

It is therefore upon this background that I an assessment was done on the efficiency in the provision of inclusive education in secondary schools in Kenya, case study of Rongo district. As majority of such students from regular schools drop out and later lead very miserable lives and even eventually die of frustrations. How efficient then is this education system that cannot make them to complete their studies and be self reliant?
Integration according to Walchron, et al. (1998) committee refers to as is distinguished in its three main categories "location integration occurs when special units or classes are attached to or share a site with ordinary schools; social interaction refers to situations where the units of pupils eat, play, and consort with other children and possibly share organized pot-of-class activities and "functional" or the fullest form of integration is achieved if in addition to social contents those with special educational needs join the regular school classes on a full or part time basis (Beveridge, 1993).

Hergely, et al. (1984) have pointed out that a pupil who usually works with an assistance in an ordinary classroom may be as segregated from other pupils as one who is withdrawn for special support, Hergely et al. (1984) noted that integration should be conceptualized as a process rather than a state and one which implies continued and planned interaction with contemporaries.

Concerns about the availability of specialist skill and knowledge in regular schools may lead some parents of children with statements to express a preference for separate provision, but with the poverty index in Kenya, 60 percent living below the poverty line, the governments idea of inclusion is welcome throughout the country so the challenge is therefore felt a great deal among the students with special needs themselves, teachers and parents. It is therefore out of parent’s interest and initiative that they either take their children to regular schools or to special school because, special units are not faced out but the move to inclusion was to solve problems of illiteracy and fight poverty and also in regard to United Nations declaration on education as a basic human right.

The impetus for school integration came from a parallel revolutionary movement as psychiatrica democratica inspired by Professor Franco Busagha in Trieste (1991). This
involved the closure of large psychiatric hospital and a wholesale transfer of mental health services to the community due to poor conditions and lack of medical treatment. These patients adjusted well with good progress and positive response realized in their treatment in the community (Mittler, 2009). This was replicated in education and the legal basis for integration was laid down in law in 1971 which stated that compulsory education should take place in the regular classes except for those children who suffer from severe mental or physical impairments that make regular education impossible or very difficult (Mittler, 2009:25). The UNESCO World Declaration on Education for All Adopted in Jomtien, 1990 called for a learning environment in which every one would have the chance to acquire the basic elements which serve as a foundation for learning and enable full participation in society.

In line with the national issues therefore, Kenya is a signatory to the millennium Declaration which was adopted by world leaders in September 2000 Millennium summit. A major commitment the Government has made towards achieving the Millennium Development Goals (MDGs) is the introduction of Universal Free Primary Education (UFPE). This effort is within the broader plan of enhancing access to Education as per the Sessional Paper No 9. Inclusive Education is hence part of the ways through which Universality of Education is to be attained.

According to the united Nations covenant / charter on Human Rights Education is stated here in as a basic human right meaning, no child who has attained the school going age (6+) should be denied an opportunity of access to school which is irrespective of status; whether normal children or those with disability, gender wise, gifted or talented.
Persons with special needs have been neglected starting with the pre colonial (traditional African Society) where giving birth to a disabled child was viewed as a curse. Into the colonial periods, Education for the disabled persons was not taken with the seriousness it deserves; as the white settlers were majorly concerned with training Africans on hard labour. Children with disabilities have been kept indoors since their parents shun shame or being ridiculed of giving birth to the same. Hence they have been denied the opportunity of access to education. Through little sensitization programs to parents that disability is not inability, children’s right to education and the United Nations declaration on the rights of the disabled persons to education, that the disabled persons to be integrated into the regular classrooms, some little progress have been made on their education. Parents always kept these children at home because they could not meet the cost of special needs secondary schools which are also few as only eighteen (18) in addition to higher institutions in Kenya, hence a relief with the inclusion of these children in the regular classrooms.

Despite all these efforts, inclusive education faces many challenges because it has not been mainstreamed in all education sub-sectors. The situation is compounded by inappropriate infrastructure, inappropriate facilities and equipments, which make it difficult to integrate students with special educational needs in regular classrooms (Sessional paper 6, 2007).

1.2 Statement of the Problem

Inclusive education is primarily about restructuring schools cultures, policies and practices so that they can respond to diversity of students in their locality. Studies reveal

5
that out of 100 children born in Kenya, 18 of them are disabled either physically or mentally Ministry of Health, Registration of Births (2009). The cultural influences on who to educate or not has always given the disabled children less priority, the stigmatization on parents that they have disabled children contributed to them not to be taken to school as depicted in the low enrolment rates. The research indicated most parents hide such children from public vicinity as it is traditionally regarded as a taboo giving birth to such children in regions which still hold such cultural ideas.

The demand for secondary education in Kenya is very high and the corresponding supply is low as 56.93% of pupils who sat KCPE in 2000 did not get places in form one in 2002 (Daily Nation, January 2002).

The government has been doing a lot with about 30% of its recurrent expenditure going to education and the least amount out of this is located to the education of the persons with special educational needs. Even with the introduction of Free Secondary education subsidy by the government in the year 2008, still low enrolment rates have been realized in the part of students with special needs, high dropout rate, low retention rates and low completion or graduation rates, can this therefore be attributed to lack of efficiency in schools where inclusive education is implemented.

In Rongo district, Data Taken from Awendo Health Centre of records on children born with disabilities indicate that, out of ten children born per week, three of them either have physical deformities, a mental problems and other disabilities. This followed up by the researcher, it has been noted that, only one out of three have been able to enroll in schools as depicted by low enrolment rates from schools records. The researcher is hence left to wonder where the two children have gone to.
The government with Free Primary Education and Free Secondary Education therefore gives such children an opportunity to enroll in any public school and study but still since the inception of inclusive education in Kenya, the enrolment rate slightly increased as indicated by the records released by the Ministry of Education on Special Education. In the schooling process of these students they end up dropping out of school as depicted in the high dropout rate and low completion rate. This hence depict that, the education system in schools may be is not meeting the needs of these students as after all this misfortunes, worse off happens as majority of these students end up leading despicably very miserable lives and eventually die just out of frustrations in life since in Kenya, Education is the Key to success. If we therefore do not look into the education of these students with special needs, how will they survive and where will they end. This was the researchers big question and it is upon this background that the problem is realized and hence the need to assess the efficiency on the provision of inclusive education in Rongo District. The information generated would be applicable to other regions of the country since inclusive education seemingly is not doing any better in even all parts of the country.

1.3 Purpose of the Study

The purpose of the study was an assessment of the efficiency in the provision of inclusive Education in public secondary schools in Rongo District, Migori County, Kenya.

1.4 Objectives of the Study

The study was guided by the following objectives;
1. Analyzing the rate of enrolment, retention and completion rates of students with special needs in regular schools.

2. Determining the effectiveness in the integration of students with special needs with the normal ones in classroom situation

3. Evaluating the instructional and infrastructural materials available for effective integration and teaching and learning process in the classroom for both normal and children with special educational needs.

1.5 Research Questions

The study was guided by the following questions.

1. What has been the enrolment trend of students with special needs in regular schools?

2. What have been the retention and completion rates of students with special educational needs in regular schools?

3. Are the teachers and students equipped for inclusive education in the regular classrooms for effective teaching and learning process?

4. How many teachers are trained in special needs have been deployed to individual schools within the district?

5. What are the possible policy strategies that could be employed to address the factors hindering efficient provision of inclusive education in public secondary schools?
1.6 Significance of the Study

The study findings can be useful in providing information to the Ministry of Education on the situation on ground which can be helpful in preparing and improving a curriculum suitable for effective implementation of inclusive education in public secondary schools. This would be in terms of the type of infrastructural and instructional materials to be availed depending on the type of educational need such as the wheel chairs to facilitate orthopeadically challenged students movements within the school, rumps; Braille machines and talking calculators for the blind, computer based assistive technology for both visually and hearing impaired.

The study was to help come up with policies for effective integration which included:

i. Through the Ministry of Education, a directive should be issued to institutions charged with the responsibility of training teachers to train all the teachers in special skills that cut across all special needs of students such as, teachers to be trained in sign language, use of Braille machine and how to read brailed documents and on other computer based assistive technology. This will help enhance the knowledge of the teacher in dealing with integrated classrooms.

ii. Sensitization of all students to realize that disability is not inability so that they can treat their colleagues with special needs with respect and dignity as lack of this has been noted to be a cause of wastage rates like in schools through emotional and psychological distress through unpreparedness of the learner with special needs.

iii. Help the Ministry in preparing a curriculum suitable for integration. This would be made possible after having determined the weaknesses of the current
curriculum from the students with special needs themselves hence, the researcher showers up the Ministry on guidelines as per the weaknesses of the current curriculum in this report.

1.7 Assumptions

The study was based on the following assumptions:

i. That the schools Principals' are all trained in inclusive Education.

ii. That the Principals were aware of the policy guiding the implementation of inclusive Education.

ii. That the respondents would be honest in giving responses.

1.8 Limitations

i) Despite the limitations and weaknesses of a case study, the information gathered was generalized to depict the Kenyan situation about inclusive education.

ii) The researcher did not have any control over the subjects, they responded according to their own wish; this helped the researcher to get the true picture about the situation on ground.

1.9 Scope of the study

The study concerned itself with the efficiency in the provision of inclusive education. Of particular interest were the retention and completion rates of students with special
educational needs, stock of trained teachers on special skills and the available resources for effective implementation of inclusive education.

The research covered only one District in Kenya-Rongo District. There was inadequate time and finances for full observation of the other Districts. However all the 34 schools were observed. This was adopted after it was realized that few of such students enroll in schools hence the need to cover all of them in the study.

1.10 Theoretical Framework: Classical Liberal Theory

Theoretical framework help in bringing unity and simplicity to the matter investigated in inclusive education.

The study of inclusive education in secondary schools in Kenya was based on the classical liberal theory of equal opportunity and social Darwinism which asserts that “each person” is born with a given amount of capacity which to a large extent is inherited and cannot be substantially changed. This education system should be designed so as to remove any barriers of any nature that prevent bright students from, lower economic background from taking advantages of in born talents” (Orodho, 2008).

Liberal progressivists like Horace Mann term education as the Great Equalizer main instrument, which would enhance life chances of those born into humble circumstances in this case, special education needs.

Social Darwinism emphasis that, every citizen should be given opportunity through education to attain the social status to which he/she entitles him/her to inherited aptitude (Orodho, 2008). The social Darwinism theory observes that provision of formal equity of access to education irrespective of status as in normal children or those with special cases
and needs is essential since, it is through education that they would be able to uncover their potentialities, exploit them for their own future needs, hence be independent.

By making primary education free and secondary subsidy to all children and further introduction of inclusive education in schools is by all means an effort by the government to mean good to all the children despite their status as (Ron Sean, 1778). States that "Men were born equal and personal inequalities should not jeopardize social equity so long as society rewards people according to their social status education is therefore a social thing that should bring equality to people as it is called by the America educator (Horace, 1889). Every body should then have access to the kind and amount of education that suits their inherited capacity. It has always been assumed that increased public spending on education reduces dropouts, repetition and accelerates completion rates in developing countries where inequalities of educational provisions are severe it may be desirable on efficiency grounds to perceive the goal of good outcome for all in the distribution of educational opportunities.

Students with special needs should therefore be supplied with the assistive technology that will enhance their learning to make them benefit equally as they are integrated in the regular classrooms. These may include; Braille, large prints, talking books, screen readers, video enlargers, electronic texts.

Through this, inequalities in participation in the classrooms would be reduced and all students would benefit equally from lessons taught and their other readings.

Through studies, it has been concluded that, there is no difference in conceptual performance between students. With special needs and the normal students Regor et al. (1984) studied the reasoning in young adolescence children with normal and defective
hearing. They were matched for sex, age, grade, and placement and on performance based IQ test, she used Piaget type questioning and evaluated responses. According to Piaget's classification of casual thoughts, the defective hearing children used more phenoministic explanations than the hearing and were equal in their mechanical explanations. There is therefore the need to enrich the learning environment of students with special needs for effective outcome, to avoid unnecessary delay or retardation in their cognitive growth as research also reveal that deaf infants born of deaf parents who use manual language develop the language system of their parents at the same age that non-hearing impaired children develop speech, hence the need for the assistive technology in school for instructions in classrooms for effective learning outcomes.

The curriculum should therefore be adapted to suit the situation on ground about inclusive education.

1.11 The Conceptual Framework

This is a simplified structure which helps in gaining an insight into the phenomenon that is needed to help in effective and efficient provision of inclusive education.

It helps explain the interrelationships between variables which are related factors connecting a decision taken with the outcome that is desired.

According to Orodho (2009) a conceptual framework is a model of presentation where a researcher conceptualizes or represents the relationship between variables in the study and shows the relationship graphically or diagrammatically.
Figure 1.12 The Conceptual Framework: Efficiency in the provision of inclusive education

Independent variables

Achievement

School resources

Physical Resources
- Buildings with ramps
- Wheel chairs
- Brailed text books
- Computer based assistive technology, Screen readers, Braille, large prints and video enlargers

Student’s characteristics
- Motivated students, diverse background, gender diverse and different socio-economic background

Teacher’s characteristics
- - High teacher morale
- Right student teacher ration
- Good working conditions
- Teacher appraisal
- High teacher morale

Dependent variables

Excellent academic performance of students with special needs in terms of:
- High completion rate/high graduation rate

Teacher intense effort

Source: Researcher
In this context, the conceptual framework is a hypothesized model identifying the kind of resources that should be availed for success to be realized in students with special needs. The diagram shows that the rightful resources needed for success to be realized in students with special needs. First, the right infrastructure such as buildings with rumps should be placed for learning and the right instructional material such as talking calculators and video enlargers and if exposed to teachers with the required skills and are motivated to work, students will come out with excellent performance and higher completion rate would be realized which were lacking in schools. All education stakeholders are hence called upon to take active role in ensuring that learning requirements for students with special needs are met in regular schools.
1.12 OPERATIONAL DEFINITION OF TERMS

**Inclusive Education**: This refers to restoring schools cultures, policies and practices so that they can respond to diversity of students in their locality.

**Integration**: Refers to learners with disabilities learning together with those without disabilities and preparing pupils for placement in ordinary schools.

**Disability**: Refers to learners with mental retardation, deaf, blind, lame, emotionally disturbed.

**Normal children**: Refers to learners in regular schools without disabilities such as hearing impairment, blindness and orthopedic

**Special needs**: Refers to anything requiring more attention in terms of time and resources

**Inclusion**: Is radical reform of the school in terms of curriculum, assessment, Pedagogy and grouping of pupils.

**Physical resources**: This refers to classrooms, text books, computers, Brailles, wheel chairs, white cane, rumps and talking calculators

**Policy**: Refers to deliberations, discussions and consultations among people in authority.
CHAPTER II
LITERATURE REVIEW

2.1 Introduction

The researcher reviewed various related books to this study in order to assist in knowing what others have done and from where to proceed and to form the foundation for the researcher's future work as this shall have led to identifying gaps in knowledge as well as weaknesses in previous studies. A recent study has shown that "review of literature also assist the researcher to discover connections analogies or other relations between different research results by comparing various investigation" (Orodho, 2009:110). The researcher has therefore reviewed Global literature from outside Africa, African literature, Kenyan literature, and literature from Rongo district, Migori County from where the study is based. The literature review here emanates from the various studies and works of Educationist committed to making people have relevant knowledge for sustainability.

Report by UNESCO, organization (2008) defines inclusive education as primarily about restructuring schools cultures, policies and practices so that they can respond to diversity of students in their locality.


From 1980 onwards the needs of children with marked disabilities began to be recognized and the first special schools and classes were organized.
In 1989, an education Act was passed in Britain permitting provision for physical and mentally defective children, this enactment emphasized defect as a basis for requiring special schooling and it was significant that defective children were the subject of separate Act.

In recent study of special needs education, it is observed that special education offers a continuous form of special teaching for children who need special medical treatment, special environment, special teaching strategies or special curriculum, special trained teachers since one cannot appoint work to act as one.

UNESCO, report (1977) notes that, special school is one that provides education for persons suffering from any disability of mind or body. It is thus segregated establishment which caters for only those persons who have special education needs and that children in special schools are isolated according to handicap against the much cherished idea of integrated with the society.

2.2 Integration

In recent study, the UNESCO came up with the idea of integrated education provision because after schools, these students are going to be exposed to the same environment where they stay, work and other places, so it would be in order to start getting used to such situations as early as possible from school.

Integration is about making ordinary schools special by transplanting the best special schools, practices, teachers or equipments into regular settings (Mittler, 2009).
Studies reveal that segregated students suffered stigmatization as they view themselves as lacking other necessary things in life which the students attending regular schools posses thus made to form a negative opinion on themselves.

With integration, each interact and bring own background, experiences and expectations to the communication event, the situation that is subject to change based on the influence of both external and internal sources. As each gain a sense of how others do their things and everyone fit into the group, hence begin to communicate and act in ways that indicate the roles we expect each member to fulfill.

Fullest form of integration is achieved if those with special education needs join regular school classes on full or part time basis while concerns about the availability of specialist’s skills and knowledge in regular schools may lead some parents of children with statements to express a preference for separate provision.

In Kenya therefore, it is the government concern in line with vision 2030 to improve the literacy level of its citizens and with the reality on ground that nearly 60% of Kenyans live below the poverty line, majority of such parents therefore cannot afford educating such children in special schools due to poverty as they lack funds.

The government therefore advocates for their inclusion in regular schools and classrooms, as inclusive education has now emerged as a major issue with persuasive moral, political and educational arguments being advanced for the increased integration into mainstream education of students with special needs.

Recently, through inclusive setting, special needs education teachers are trained at Kenya Institute of Special Education (KISE) at degree and masters level at Maseno and Kenyatta University respectively, funds have been allocated to SNE teachers in special
schools, but since integration begun, there has not been clear guidelines in the implementation of inclusive education which calls for the assessment on the efficiency in the provision of inclusive education.

Special schools that used to serve at secondary level up to 2008, Ministry of Education report indicate that they were few and this was depicted in the few enrolment cases realized. The poverty trend that has limited access of such children to special schools is also noted in the number of students enrolled in inclusive classes, this triggered the government to adopt inclusive education in mainstream schools as inclusion is based on a value system from gender, nationality, race, language of origin, social background, level of education hence schools can do a great deal to reform their practices on these lines (Mittler, 2009).

2.3 Tabulation of Special Needs Issue

Table 2.1 Number of special needs education institutions by category 2002-2008

<table>
<thead>
<tr>
<th>Category</th>
<th>2002</th>
<th>2003</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary special schools</td>
<td>94</td>
<td>97</td>
<td>109</td>
</tr>
<tr>
<td>Units integrated</td>
<td>726</td>
<td>1100</td>
<td>1340</td>
</tr>
<tr>
<td>Secondary special schools</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Vocational</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Diploma colleges</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Universities integrated</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Primary teachers colleges</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Special Education Section: Ministry of Education
Table 2.2 Number of Special Needs Institutions by province and specialty

<table>
<thead>
<tr>
<th>Province</th>
<th>Mentally impaired</th>
<th>Physically impaired</th>
<th>Hearing impaired</th>
<th>Visually impaired</th>
</tr>
</thead>
<tbody>
<tr>
<td>CENTRAL</td>
<td>04</td>
<td>03</td>
<td>08</td>
<td>02</td>
</tr>
<tr>
<td>COAST</td>
<td>04</td>
<td>02</td>
<td>05</td>
<td>02</td>
</tr>
<tr>
<td>EASTERN</td>
<td>07</td>
<td>01</td>
<td>05</td>
<td>02</td>
</tr>
<tr>
<td>NAIROBI</td>
<td>09</td>
<td>-</td>
<td>01</td>
<td>-</td>
</tr>
<tr>
<td>WESTERN AND RIFT VALLEY</td>
<td>07</td>
<td>03</td>
<td>09</td>
<td>-</td>
</tr>
<tr>
<td>NYANZA</td>
<td>05</td>
<td>02</td>
<td>08</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Special Education Section, Ministry of Education.

Table 2.3 Enrolment in Special Needs Institutions by category 2003-2008

<table>
<thead>
<tr>
<th>Category</th>
<th>2003</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special primary</td>
<td>13,303</td>
<td>35211</td>
<td>37202</td>
</tr>
<tr>
<td>Special secondary</td>
<td>3984</td>
<td>10028</td>
<td>10669</td>
</tr>
<tr>
<td>Special technical/vocational</td>
<td>1362</td>
<td>2650</td>
<td>3045</td>
</tr>
<tr>
<td>Primary units/integrated</td>
<td>73121</td>
<td>159872</td>
<td>171079</td>
</tr>
<tr>
<td>Total</td>
<td>91770</td>
<td>207761</td>
<td>221995</td>
</tr>
</tbody>
</table>

Source: Special Education Section: Ministry of Education
2.4 Implications

From the table given above, it can be deduced that:

**Table 2.1:** This depicts that the number of primary special schools is many compared to the secondary special, so where the other students who were enrolled in the other schools go if there are these limited places at secondary level.

The table does not indicate the integrated units, where then does these students go to from the integrated primary units, they are wasted brains as noted in the limited number of colleges and universities which train them.

**Table 2.2** This gives the number of special institutions per province which is far much less than the amount of enrolment expected.

**Table 2.3** Shows that, special secondary enrolment was much less as compared to the number of enrolment at the primary special Schools. This depicts high wastage rate / high drop out rate.

From primary integrated schools, the enrolment was too large up to 171079, if they were not catered for at the secondary level, where then did these students end up?

The enrolment rates are higher in the integrated units which call for more integration at higher levels of education in public institutions.

From all that is talked about, the UN convention on the rights of a child and the United Nations Educational, Scientific and cultural organization (UNESCO) promoting the National Development in the field of special needs (Mittler, 2009), Governments of the world still are not committed to promoting education of children with special needs as depicted in the resource allocation in terms of personnel and physical resources.
2.5 Resource Availability to Students with Special Needs.

In inclusive classrooms, more students with disabilities are in a general education classroom and teachers, principals and schools are held more accountable for the performance of student’s and as a result, teachers and principals must provide relevant resources and have relevant skills to deal with inclusive classrooms.

Bauer, A.M et al. (2004) noted that, “if inclusive classrooms are going to be successful, there must be changes in the traditional general education classroom of students in rows, sitting quietly, reading taking notes and filling in worksheets.

McCleskey and Waldrom, (2001) insisted on “very good” instruction which will help every student in the classroom to achieve the best of his or her ability. In their exploration of successful inclusive classroom, McCleskey and Waldron (2001) asked teachers what needed to happen. Teachers reported that they felt students with disabilities could benefit from the classroom if two basic changes in classroom practice were made and these include, modifying the curriculum to enhance relevance for each student and modifying instructional techniques.

The modifications of instructional techniques is what is generally characterized as good teaching as the students make use of Braille machine, Braille paper to assist them in note taking and reading, Jaws which is computer software that helps in reading as it gives commands/directives on what to do, talking calculators, talking books, cassettes and compact discs, all these to assist students with visual impairments in reading such that when in integrated classrooms the teacher can still teach at the same pace and equitably every student benefit. The teacher to engage the use of sign language and also a lot of reading on the board for students to read, and as teachers explain points using the sign
language at the same time are required to talk for students to do lip reading. For partial visual impairment the use of large prints are encouraged to assist them read with ease. Lipson and Wixson (1997) suggest that the teacher’s knowledge and belief about teaching and learning are the most influential factors in the success of inclusive classroom.

According to Bauer, M. A. et. Al. (2004) description on a reflective teacher as they are more likely to seek help and expand their skills in teaching and collaboration. A successful teacher according to Stanovich and Jordan (2002) is a scientific practitioner, who observe their students, develop hypothesis about learning, develop plans, observe results, use people and resources to support their students learning and to ensure that every student benefits, Ford and Schnorr (2001) describe principles that clarify the general considerations of inclusive settings such that, priority should be given to the development of fundamental skills which include successful interaction to complete task, solving problems and contributing to the classroom. Every student should also have the opportunity to experience mastery and accomplishment which is only possible through appropriate teaching and learning resources.

Bauer, M. A et al. (2004) suggest principles usually involved in the implementation of inclusive education as that of normalization which means that a person with a disability should have the opportunity to live as similarly to others as possible hence teachers must try to help students with disabilities have the same opportunities and experiences as their peers through other adjustments with the right instructional materials in their classrooms. Secondly is the principle of Natural proportion which states that classrooms should
reflect the characteristics of the community at large, and the principles of problem solving other than fixing a student problem.

2.6 Instructional Planning For Inclusive Classrooms

According to Bauer, M. A. et al. (2004), individual learning difference should be considered and support given to the needs of the individual. Since in inclusive classroom different students have different needs or level of disabilities hence instructional strategies should be organized to help guide individuals in identifying and organizing content. There should not be barriers to accessibility and acceptance of individuals with disabilities as the teachers also select and use specialized instructional strategies appropriate to the abilities and needs of the individuals.

For effective instructional practices in inclusive classrooms, Bauer, M. A. et. al.[2004] puts across effective teaching strategies which include, collaboration among stakeholders such as teachers who to involve community, parents and students to shape and help realize a positive, appropriate learning environment as parents through the National Parents Teacher Association to help them air their views through which these students can be helped.

Students should engage in a self directed learning environment as they learn to set goals and engage in self instruction, monitoring, and Peer supports so that the learners can be both teachers and learners in the classroom hence engage in cooperative learning.

Behavior management should be adopted in inclusive classrooms through the use of effective instructional practices and classroom climate management as the teacher becomes cheerful, friendly, self confident, good listener, realistic in their perceptions,
clear, patient and determined to work with their students and firm and flexible; the teacher should also come up with teacher student assistance teams as Hayek, (1987) defines teacher / student assistance teams as teacher centered support system which develops ways in which the teacher or teaching team can better meet students needs as by the end of the meetings, they shall provide a document that outlines the components of the interventions.

Mittler, (2009) suggests that, in instructional planning, all teachers should be prepared to teach all pupils. In line with equity and access; the government and parents as stakeholders in education have done little following resource allocation as seen in table 2.1 and table 12.2 the disabled students therefore have a right to be heard and their problems confronted for there success in school. As Mittler, (2009) puts it that the Disability Rights Commission set up a Disability Rights Task Force to look into the needs of the disabled and help them achieve the basic human rights one of which is right to education and outlaw institutional discrimination.

In the United kingdom (Mittler, 2009) states that “there is very little coordination in the implementation process by the central government and large variation in the amount and quality of support given to pupils and teachers” further more, this is a perfect Kenyan situation replicated as is realized in the teachers training which is not changing to meet the needs of the new system with content being more theoretical rather than practical hence “the disappointing implementation of upper secondary.”
2.7 Students enrolment rates in other countries and other issues in inclusion.

Students with Special Needs Enrolment rates in other countries starting with a case study of Lesotho reveals that 92% of students with disabilities enroll in regular schools. In Italy, although 99 percent of children with special needs are in regular schools there is still strong support for the principle of integration, Abbring and Meijer (1994) notes that, many serious problems are realized with coordination being little by central government as not enough trained teachers and equipments are availed in schools.

Lesotho compared to Italy, records high drop out rates from school but its government is still determined to integration in order to achieve Education for All. Teachers are being trained in the required skills and knowledge and appropriate teaching and learning strategies adopted such as practical in order to enable students with sensory skills to learn and benefit along side their normal peers.

The local communities are encouraged to team work in order to help the students with special needs as realized in Italy and Lesotho as partnerships were formed among parents who had children with special needs, associations of disabled persons, churches and business and community leaders have worked for this inclusion and have demonstrated that partnership with government and with professionals can be powerful instrument of change this secondary level (Mittler, 2009:25).

Mittler, (2009) notes that, the old ideologies should be debunked about disabled children not being able to do similar tasks as those done by normal peers and came up with the social model of disability based on the proposition that it is society and its institutions that are oppressive, discriminatory and disabling and that attention needs to be focused on
the removal of obstacles to the participation of disabled people in the life of society and in changing institutions, regulations and attitudes that create and maintain exclusion.

In the context of education, the restructuring of schools along inclusive lines is a reflection of the school model in action (Campbell and Oliver, 1996). The main outcome as per Mittler, (2009:100) in instructional planning for inclusive classroom was “setting suitable learning challenges, responding to pupils diverse learning needs and overcoming potential barriers to learning and assessment for individuals and groups of pupils”. This is worth emulating even in our Kenyan schools in order to check and prevent the low transition rates and high dropout refers to students who do so as they view the syllabus as irrelevant to them for efficiency to be upheld.

Mittler, (2009) notes that, inclusion is a journey without end as some schools are equipped for the journey others are not hence such would want to discard it and as a result each school will encounter different obstacles along the way. The researcher therefore is to evaluate the journey Kenya schools take to efficiently implement inclusive education which so far through various studies of documentaries has been realized to be having problems as noted in the low enrolment rates, high dropout rates and low completions rates.

Barton and Armstrong (2007) notes that, the challenges of cross cultural understanding also play a major role in educating disabled persons. In England, there is non-segregation in education with problems of tailor making curriculum to fit the needs of students with special needs into the main stream curriculum. In Spain, the main agenda on curriculum for special needs education was to individualize it for different needs, teacher education, team building, practical work and collaboration among schools and education
stakeholders to better inclusive education among academic community, professionals and teachers. In France, same emphasis has been made with deviation on the Ministry of finance for more fund allocation since these students need to use some special equipments not required by normal children as they emphasize for 100 percent enrolment since education is a basic right of the child.

In Libya, children rights is in crisis (Barton and Armstrong, 2007:73) hence this calls for reviewing and confirmation of their rights within the country which is under way as evident in all sector restructuring. The main problem being lack of education provision for children with special educational needs (AI – Shapani, 1996). India suggests technical support, policies and legislations in the international context for standardization of inclusion among all countries and the creation of National resource centre for inclusion with early interventions in a child’s area of special need, alongside teachers being retrained on new skills in special education needs.

In Tobago, Trinidad, Zimbabwe, Canada, Cyprus and Ireland, all talk of inclusive education as characterized by a lot of challenges which need to be addressed and these include; lack of equipments devices to support inclusion, lack of trained personnel as teachers in regular schools are not trained to teach students with special educational needs, lack of parental involvement in most countries and lack of financial support as most countries experience high poverty level especially in developing Nations. Non-inclusive curriculum and inclusive –pedagogy with the increasing cases of special needs in education, the need for Education For All and self independence as population also is on the increase in Kenya, it calls upon all education stakeholders to seek redress in inclusive education for an inclusive society to be attained thus the need to address
challenges in the implementation process of inclusive education as noted as evident in literature reviewed.

It is therefore upon this background that the researcher sought to assess the efficiency in inclusive education in Kenya.

2.8 Summary

From the literature reviewed in this chapter, it has been noted that inclusive education implementation process is faced by a number of challenges even though other countries have higher enrolment rates registered, problems are realized in the inclusive classrooms in relation to the mode of content delivery, instructional strategies, curriculum content and resource availability, in terms of personnel to facilitate the implementation process and physical facilities to enhance the implementation as depicted in Lesotho’s case. Studies still reveal that schools have less trained teachers, teacher have an attitude and feeling that students with special needs should enroll in special schools, teachers have low priority in training on special needs education. And the governments not able to take affirmative action in the training of teachers and checking and funding the implementation process of inclusive education. It has emerged from literature reviewed that the introduction of inclusive education has led to new fresh demands in terms of skills and knowledge, personnel and equipments. This study therefore sought to find out the efficiency in the provision of inclusive education in public secondary schools in Rongo district.
CHAPTER III
RESEARCH METHODOLOGY

3.0 Introduction

This chapter entails the procedures and methods used in the study to determine the real situation on the ground about inclusive education. It contains research design, where the study was done (study locale], Target population, sample used, research instruments, data collection procedures and how data was analyzed for clarity of information in report.

3.1 Research design

The study hence adopted the use of a descriptive survey design to help investigate the situation on the ground on the efficiency of inclusive education in secondary schools in Kenya. The survey was concerned with the generalized statistics that result when data abstracted from a number of individual cases (Lovell and Lawson, 1970). According to Gay (1992) a survey is an attempt to collect data from the members of a population in order to determine the current status of that population with respect to one or more variables. Survey studies, according to Lockesh (1984), are conducted to collect detailed descriptions of existing phenomena with the intent of employing data to justify current conditions and practices or to make intelligent plans for improving them.

Orodho (2009) shows that survey is the most frequently used method for collecting information about people's attitudes, opinions, habits or any other variety of education or social issues.

The main justification for survey design is that it will give room for one on one with the principals of these schools, DEOs and administration of questionnaires to a sample of
students. The survey will be very effective because the type of information needed such as enrolment will be obtained from school records. This has the potential to generate rich information that would help the Ministry of education to improve every aspect of education in the attainment of education for all goals. This will be made effective through provision of the right physical facilities and human resources for Special Education in regular schools in the integrated classrooms.

This design will enable the researcher to collect information from a large population by selecting and studying the sample from the population.

3.2 Locale of the Study

This is the extent to which the research was undertaken and therefore, the study was carried out in all public secondary schools in Rongo District in Migori County in Kenya. The topography of the area is that, it lies within the sugar belt, receives ample rainfall and a bit of mining of gold also takes place from this region. People are predominantly farmers who grow sugarcane to supply the SONY SUGAR COMPANY and also grow other type of crops on subsistence basis but people are still very poor.

The district was divided into three divisions. The study was carried out in the whole district because, it is very populated, nearing Tanzania border and registers low enrolment in schools as compared to other districts with such advantages.

This was done to ensure fair representation see table 3.0; as the categorization adopted to ensure that each student characteristic and experiences were catered for in these places of learning hence the pure status schools the mixed schools, boarding schools and day schools.
### Table 3.1 Secondary Schools within Rongo district according to their status

<table>
<thead>
<tr>
<th>S/NO.</th>
<th>Mixed Day</th>
<th>Pure Girls Boarding</th>
<th>Pure Boys Boarding</th>
<th>Pure Girls Day</th>
<th>Pure Boys Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ngonga</td>
<td>Ulanda girls</td>
<td>Awendo-school</td>
<td></td>
<td>Tom Mboya</td>
</tr>
<tr>
<td>2</td>
<td>Owing Rondo</td>
<td>Owiro Akoko</td>
<td>Pe-Hill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Malunga</td>
<td>Dede</td>
<td>Kokuro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Rabondo</td>
<td>Uyugi Ogango</td>
<td>Manyatta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Nyakuru</td>
<td></td>
<td>Kaderobaria</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Kamyawa</td>
<td></td>
<td>Kangeso</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Kogelo</td>
<td></td>
<td>Rakwaro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Yago</td>
<td></td>
<td>Kanga</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Kanyasrega</td>
<td></td>
<td>Kanyawanga</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Gamba</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Rakwaro</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Arundo</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Kameji</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Nyangau</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Winyo</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Minyenya</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Sigiria</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Omware</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Langarek</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Kamgundho</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL** 20 4 9 1 0

Source: Rongo District Education Office

### 3.3 Target Population

Berg and Gall (1996) defines population as all member of a real or hypothesized set of people, events or objects to which the researcher wishes to generalize the results of the research. The study involved the use of public secondary schools drawn from each division within Rongo district. The district has a total of thirty four (34) public secondary
schools. Each school has a proximately ten (10) teachers and a population of about 200 students per school, all these schools comprised the target population. Table 3.1 constituted target population.

3.4 Sampling Selection

A sample is a small group obtained from the accessible population (Mugenda and Mugenda, 1999). Orodho (2005) notes that sampling is a technique where the investigation seeks knowledge or information about which population, objects or events by observing a sample and extending the findings to the entire population.

In choosing the schools from each division (stratum), the method of proportional allocation such as, proportion random sampling technique was used, where the sizes of the samples from the different strata was kept proportional to the sizes of the strata, this was because random sampling allows all members of the population to have an equal and unbiased chance of appearing in a sample.

The number of secondary schools in each division was multiplied by the representative index (34= 0.5) in order to determine how many schools would be involved in this study, see table 3.1 This sampling technique was to ensure fair proportionate representation of the study population since proportionate number of schools was randomly sampled from each division depending on the number of schools it had. Hence out of 34 schools 18 schools were sampled which comprised 63 percent of the target population and this is adequate for educational research as outlined by Gay (1992).

All principals of selected schools participated in the study.
### Table 3.2: Total population, sample and percentage

<table>
<thead>
<tr>
<th>School status</th>
<th>Target population</th>
<th>Sampled schools</th>
<th>No. of students targeted per school</th>
<th>No. of students sampled per school</th>
<th>Percentage sampled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed day</td>
<td>20</td>
<td>10</td>
<td>20</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Pure girls</td>
<td>5</td>
<td>3</td>
<td>20</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td>Pure boys</td>
<td>9</td>
<td>4</td>
<td>20</td>
<td>5</td>
<td>25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
<td><strong>17</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The same method of proportionate random sampling was used to selected students involved in the study per school.

The sample per school was 10.0% which is adequate for educational research as outlined by Gay (1992).

### 3.5 Research Instruments

The researcher employed two data collection tools in the study. These include questionnaire, and interviews.

#### 3.5.1 Principals Interview Schedule

Generated data on the academic qualifications of the teachers in the institutions, teachers efficiency in handling the inclusive classes and their attitude towards the integrated system. This was adopted since the principals are deemed busy hence might not have to answer the questionnaires hence assisted the researcher to gather in depth information on the efficiency on inclusive education as the interview schedule contains soliciting information covering all research questions of the study.
3.5.2 District Education Officer Interview Schedule (DEO).

This generated the number of qualified teachers in the area of special needs education within the district and the amount of funds allocated for special needs education.

Interview was adopted for the DEO because they are always considered having limited time to spare answering a questionnaire which if left for later attendance at own time, they might delegate the work of answering the questionnaire to his/her secretary, so to avoid such mismatch of information interview is adopted by the researcher for the DEO and according to Kiess and Bloomquest (1985), an interview is appropriate when the sample is small since a researcher is able to get more information from respondent than would be possible using a questionnaire.

3.5.3 Questionnaires For Students With Special Educational Needs

The use of questionnaires in this research was important in obtaining information from students from various schools on resource availability and how they cope with their normal peers. According to Lovell and Lawson (1971) questionnaires are widely used in education to obtain information about current conditions and practices and to make enquiries concerning attitude and opinions quickly and in precise form.

Gall et al. (1996) points out that questionnaires are appropriate for studies as they collect information that is important for making precise judgment. Orodho (2004) emphasizes that the use of questionnaire has the ability to collect large of amount of information in reasonability and in quick space of time and the response can easily be obtained, questionnaires reaches large number of respondents and takes short time. The researcher will use both closed ended and open ended questions. Mugenda and Mugenda (1999)
observe that closed ended questions are easier to analyze since they are in their usable form and open ended questions permits greater depth of response. This study generated information on how these students cope in their learning processes in inclusive classrooms with their teachers in terms of instructional media and resources.

3.5.4 Questionnaire For Teachers

Checked the credibility of the responses from the principal’s interview schedule on teachers qualifications, resource availability and this generated lack of qualified teachers, teacher resentment towards inclusion and lack of physical resources. Borg and Gall, (1983) points out that, questionnaires are appropriate for studies as they generated information about teacher qualification and resource availability that is important for making precise judgement.

3.6 Piloting

This was carried out in one school per stratum / division in order to find out the shortcomings, vagueness and relevance of the questions which enabled the researcher to rectify the affected questions.

A pilot study was conducted with the students and principal in three schools whose aim was to test the validity and reliability of the research instrument and suggestions on how to improve them. Three schools were involved in piloting. Orodho, (2008) notes that the number of pre test should be small about 1% of the entire sample size. Piloting is important because deficiencies in the pre testing such as insufficient space to write the response, wrong phrasing could be detected and vague questions revealed as respondents
interpret them differently hence this will give the researcher the opportunity to rephrase the questions affected hence validity of the instrument (Orodho, 2008).

In testing the validity of the research instruments, the researcher applied content validity where the expert’s opinion was sought. Those involved in the pilot study were not included in the main study.

3.6.1 Validity

This is the accuracy and meaningfulness of inference which are based on the research results. It is the degree to which the results obtained from the analysis of the data actually represents the phenomenon under investigation. The issue of validity is the degree to which an empirical measure or several measures of a concept accurately represent that concept.

Gall et al (1996) observes that content expert help determine content validity by defining precise terms and domains of the specific content that the test is assumed to represent and then determine how well the content is sampled to test items. It can also be pointed out that the condition applied to pre testing will also apply to the actual data.

According to Gall (1997), Content validity is established by an expert. The researcher therefore consulted the supervisors to review the concept of the instruments. The researcher has developed the instruments and took them to the supervisor for perusal.

The instruments were administered to students in the schools selected for the pilot study. The researcher with the help of the supervisors revised the instruments as they were the great consultants in the construction of the questionnaires.
3.6.2 Reliability

This is a measure of the degree to which a research instrument yields consistent results after repeated trials under similar conditions (Orodho, 2009). Validity of research instrument is the degree to which an item measures what it is purported to measure (Gay, 1992). Mugenda and Mugenda (1999) notes that the answered questionnaires are best scored manually. Before the actual data collection, piloting of questionnaires was done in three public secondary schools which did not participate in the final study. Piloting enabled the researcher to test the reliability of the instrument. The researcher used the pilot study to identify any items in the questionnaire that were ambiguous or unclear to respondents and changed them effectively. The pilot study enabled the researcher to familiarize himself with the administration of the instrument. The correlation was realized by administering the questionnaires a second time to establish the extent to which the contents of the questionnaires were consistent in eliciting the same responses every time the instruments are administered.

3.7 Data Collection

The researcher obtained an introduction letter from Kenyatta University. Legal consent was acquired from the Ministry of Education and the letter from the DEO Rongo District to conduct the research. Letter to the principals sought further permission. The researcher therefore personally visited the study schools to administer the questionnaires and conduct interview which no research assistants was obtained.
The researcher projected this to take place in September third term of the schools calendar 2011. The researcher booked an appointment with the DEO on appropriate date to conduct interview.

Interviews were conducted to principal of the school, questionnaires to students and thereby given time to complete the questionnaire of about twenty minutes after completion, the questionnaires were collected on that same day by the researcher after making such arrangements with the schools principal. The university endorsed the letter. Face to face interview was conducted whereby the researcher recorded down DEO’s responses as the interviews progressed.

3.8 Data Analysis and Presentation

The researcher ensured that the questionnaires were double checked for completeness. The raw data from the field was categorized into information that answered the researcher’s objectives. The information was summarized and statistics derived. Data was subjected to descriptive analysis with both qualitative and quantitative treatments as qualitative analysis used written statements while quantitative data analysis used tables, percentages and frequencies. Further analysis was done using statistical package for social science (SPSS), hence simple descriptive statistics such as percentages have been adopted for the study as Bell (1993) notes that they have a considerable advantages over more complex statistics. Borg and Gall (1983) hold that the most widely used and understood standard proportion is the percentage.
CHAPTER IV
DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.1 Introduction

This chapter covers the results of the study and discussion of findings. The study aimed at investigating and assessing the efficiency in the provision of inclusive Education in public secondary schools Rongo District. The study had five research questions:

i. What has been the Enrollment trend of students with special Education needs in regular schools?

ii. What have been the retention and completion rates of students with special educational needs in regular schools?

iii. Are the teachers and students equipped for inclusive education in the regular classrooms for effective teaching and learning process?

iv. How many teachers are trained in special needs have been deployed to individual schools within the district.

v. What are the possible policy strategies that could be employed to address the factors hindering efficient provision of inclusive education in public secondary schools?

Each research questions is discussed in this chapter. Data was collected from 34 schools, 32 head teachers, 64 teachers and the District Education Officer. The data was subjected to descriptive analysis encompassing a range of both qualitative and quantitative treatments. Qualitative data was analyzed using verbal symbols to describe the researcher’s objectives. (Van Dalen, 1962)
Quantitative data was presented in an easy and comprehensive way by use of table, pictures, percentages and graphs based on the research questions.

4.2 Background Data of the Respondents

The study was conducted in 34 schools out of a population of 34 in Rongo District. All the principals from the schools responded to an interview conducted by the researcher. At least two teachers per schools responded to the questionnaires designed for teachers by the researcher. The District Education Officer responded to an interview to give facts to the researcher about inclusive education in his area as well as students with special educational needs responded to a questionnaire designed by the researcher to give their perspective on the effectiveness of inclusive education in their schools.

Table 4.1 Teachers Academic Qualifications

<table>
<thead>
<tr>
<th>ACADEMIC QUALIFICATION</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters in Education (MED)</td>
<td>26</td>
<td>40.625</td>
</tr>
<tr>
<td>Bachelor of Education (BED)</td>
<td>31</td>
<td>48.437</td>
</tr>
<tr>
<td>Diploma in Education (Dip/Ed)</td>
<td>7</td>
<td>10.937</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>64</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Teachers Questionnaire.

Table 4.1 shows that 26 (40.625%) Teachers had Masters in Education,31 (48.437%) Teachers had Bachelor of Education and 7 (10.937%) Teachers had Diploma in Education.
4.3 The Enrolment Trends of Students with Special Educational Needs in Regular Schools.

The first Research question asked: what has been the enrolment trend of students with special educational needs in regular schools?

Table 4.2 below presents data on the average number of students with special educational needs per class in the 34 schools.

Table 4.2 Average Number of Students with Special Educational Needs Per Class

<table>
<thead>
<tr>
<th>Average number of students with special educational needs</th>
<th>Average class population</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>40 – 50 students</td>
<td>14</td>
<td>41.17</td>
</tr>
<tr>
<td>3</td>
<td>Over 50 students</td>
<td>20</td>
<td>58.82</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
<td></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Source: Principals interview schedule.

The table above shows that 14(41.17%) schools had an average of 2 students with special Educational need in a class of an average number of students of 50 – 60 students per class: while 20(58.82%) schools had over 60 students per class averagely but only 3% averagely constitute students with Special Educational needs. This is not in line with the previous findings by Abbring and Meijer who noted that 92% of students with disabilities enroll in regular schools.
Table 4.3 Problems faced during admission of student

<table>
<thead>
<tr>
<th>Problems Faced</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequacy of resource materials</td>
<td>30</td>
<td>88.24</td>
</tr>
<tr>
<td>Inadequate space</td>
<td>32</td>
<td>94.12</td>
</tr>
<tr>
<td>Irregular reporting</td>
<td>14</td>
<td>41.18</td>
</tr>
</tbody>
</table>

Source: Principal interview schedule.

The principals reported that the problems faced during admission included inadequacy of resource materials (88.24%) inadequate space (94.12%) since the classrooms are already congested as a result of free primary education and secondary education, and irregular reporting (41.18%). This shows that shortage of resources which include classrooms, desks, textbooks such as talking books for the blind, Braille machines for the blind and classrooms constructed using rumps to facilitate the movements of students with physical disabilities such as the lame and failure to embrace the assistive technology as most schools still use outdated technology to do even office work, hence cannot afford computer based assistive technology for their students with special Educational needs such as large prints on screen reading, compact discs, and also talking calculators. These problems are evident in the dilapidated structures used as classrooms which cannot cater for the lame students and also the poor construction strategies used by designers of some facilities in some schools which include the library, laboratory, classrooms and toilets.
Figure 4.1: The state of toilets in a participating school

Figure 4.2: The condition of doors as entrance to classrooms

The legal provisions and policies governing education in Kenya as spelt out in the schools management guide (Ministry of Education, 2003) outline the number of sanitation facilities required in a school. According to this guide, sanitation facilities
required should be in the following ratio 1:30 for boys and 1:25 for girls, a urinal pit for boys and at least one toilet for staff. The study carried out in the past found out that 5.6% of the schools that were involved in the study had been closed down due to lack of toilets. A study in 2004 by Ngetha carried out in Ruiru Division established 74% of the schools experienced a shortage of latrines. This is confirmed by de Vreede (2003) who agrees that a severe shortage on toilets in many public schools is undermining the efforts to provide quality Education due to delays caused as students queued to visit toilets interfering with the school timetable.

The teacher student ratio is another evident factor that hinders admission of students to schools as admission is done considering the availability of space in the already available classrooms. Students are so many in regular classrooms which hinder the teachers from giving individual attention especially to students with special needs as sourced from the principals' interview schedule.

4.4 The Retention and Completion Rates of Students with Special Education Needs

The second research question asked: what has been the retention and completion rate of students with special educational needs in regular schools?

Many problems are experienced in admission as principals have to limit admission considering the availability of facilities in school. More challenges are met by students with special needs since by the research findings, from attendance as evaluated from the attendance register maintained by the class teachers, majority of these students rarely
come to school. This poses a challenge and derails the quality of education especially in
day status schools.

The retention and completion rates are therefore interfered with as they drop out of
school before they reach the forth form as evident in table below.

Table 4.4: Enrolment Trends of Students with Special Educational Needs in
Classrooms

<table>
<thead>
<tr>
<th>YEAR</th>
<th>FORM I</th>
<th>FORM II</th>
<th>FORM III</th>
<th>FORM IV</th>
<th>GRD RATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>20</td>
<td>18</td>
<td>16</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>22</td>
<td>19</td>
<td>17</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>23</td>
<td>21</td>
<td>19</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>25</td>
<td>23</td>
<td>21</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

Source: Principals Interview schedule.

From the table above, in each box, the upper data represents the total grade enrolment
and the lower data represents repeaters per grade.

This data comprises the average number of students with special educational needs who
enrolled in the 34 schools within Rongo District.
The Retention Rates of Students with Special Educational Needs

Retention rate is the net survivors into a subsequent grade in a subsequent year plus repeaters of the same grade of the subsequent year divided by the total enrolment in the previous grade in the previous year.

The formula for Retention Rate is

\[ RR = \frac{N^{k+1} - R^{k+1} + R^k}{N^k} \]

Where by

RR denotes Retention Rate
N denotes Total grade enrolment
R denotes Repeaters
k + 1 denotes subsequent grade.
k denotes class, form or Grade
t denotes year
t + 1 denotes subsequent year.

RR between form 3 and 4 in 2009 is

\[ RR = \frac{14 - 7 + 6}{17} \]
The Retention Rate from the above calculations is consistently low. This hence indicates that the ability of this education system to retain learners in school is very low hence the system is inefficient.

A comparison made between the Retention Rate in 2009 and 2010 in form 3 and 4 depicts that the Retention rate is consistently on the decrease hence the education system
is termed inefficient. According to UNESCO, (1998) on analysis of students' data, it is specified that "if the Retention Rate is consistently decreasing, then that level of the education system would be termed inefficient. This system is therefore unable to retain its students hence inefficient.

The Graduation Rates (Gr) For Students with Special Educational Needs.

The graduation rate is the total number of students who graduate in a particular year when divided by the total number enrolled in the final grade in that particular year. The notation is

\[
\frac{G^{k+3}}{N^{k+3}} \quad t+3
\]

where by

- \(G\) denotes Graduates.
- \(N\) denotes the enrolment in total
- \(K+3\) denotes fourth form
- \(t+3\) denotes fourth year

Hence the graduation rate for the following years are;

GR for 2007 \[\frac{G^{k+3}}{N^{k+3}} \quad t+3\] \[= \quad \frac{4}{10} = 0.4\]
GR for 2008 = \( \frac{6}{15} \) = 0.4
GR for 2009 = \( \frac{6}{14} \) = 0.428
GR for 2010 = \( \frac{5}{12} \) = 0.417

From the above, Graduation rates are not significantly increasing when evaluated from 2007 to 2010, this therefore indicates that the systems output is less than half the total number enrolled which depicts inefficiency in the level of the education system. According the Chesswas, (1969) “internal efficiency of educational institutions is said to be efficient when the maximum output is obtained in a given input or if a given output is obtained within minimum possible input”

Chesswas, (1969) stated that educational inputs comprise the buildings, teachers, books, teaching materials which may be aggregated financially in terms of expenditure per student per year and the number of pupil/students year used by the cohort/lot of students, to graduate constitutes an input indicator appropriate for the measure of efficiency in education.

From the principals’ interview schedule, it is indicated that on average, students with special educational needs take six years to complete their fourth form and this depicts a very slow pace which comprises high repeater rate as indicated in the table 4.4. above as almost half of the number enrolled repeat a grade.
Figure 4.1 Strategies of Coping with Low Retention Rates and Low Graduation Rates.

<table>
<thead>
<tr>
<th>Coping strategies</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remedial lessons (5)</td>
<td>14.7%</td>
</tr>
<tr>
<td>Assistive Technology (7)</td>
<td>20.6%</td>
</tr>
<tr>
<td>Right Infrastructure (9)</td>
<td>26.5%</td>
</tr>
<tr>
<td>Right instructional Material (13)</td>
<td>38.2%</td>
</tr>
</tbody>
</table>

Figure 4.3 shows that 14(38.2%) principal would embrace right instructional materials to enhance efficient teaching in inclusive classrooms. These include availing the right textbooks for each special case for example, talking books for visually impaired and brailed books’ large prints for partial blindness, 9(26.5%) would embrace the right infrastructure and good planning of classrooms to facilitate the movements of these students within the school such as building rumps on the entrances of all building which includes libraries, laboratories, toilets, dining halls, dormitories and classrooms to ease movements of the orthopedically impaired. Classrooms be big enough to accommodate the large number of students in inclusive classroom. A national study by UNESCO (2005) established that most schools did not have adequate classrooms to accommodate
the large numbers of pupils enrolled in primary as a result of free primary education and further transition to the secondary level. UNESCO (2005) further suggested that part of the constituency development funds should be used to put up classrooms and toilets or rehabilitate facilities in schools to provide students with a conducive learning environment. 7(20.6%) principals would embrace assistive technology that is, the use of computers and other modern technologies to facilitate learning in the inclusive classrooms. Others include the use of talking calculators, talking books, screen reading and large prints on screen to assist both visually and hearing impaired students. Remedial lessons was also suggested by 5(14.7) of the principals as a way of giving these students extra lessons and time for the internalization of concepts taught in class and for any further simplification of concepts or on any difficult task for them.

4.5 Readiness of Teachers and Students for Inclusive Education

The third Research Question asked: Are the teachers and students equipped for inclusive education in regular classrooms for effective teaching and learning process? For teaching and learning to be enhanced in inclusive classrooms, the teachers and students should be trained in certain skills like sign language for the hearing impaired and the school should be equipped also with the right infrastructural and instructional materials such as the right text books and building for each case of specialty. In relation to the above statement and with the analysis of data on teachers also considering the stock of teachers, UNESCO (2005) notes that “stock should be built up into national aggregates by level where applicable such as the stock of teachers in each sector of the educational services compared with the desirable situation based on official staffing formulae”
Figure 4.4 shows the number of trained teachers in special education needs relative to the number of teachers within the district.

Figure 4.2 Teachers Training on Special Needs Education

Teachers trained on special Educational needs [50] 10.42%

Teachers with no skills, Training on special educational needs (43.0) 89.58%

Source: District Education Officer Interview schedule

Figure 4.4 above shows that 50 (10.42%) teachers are trained on special needs education while 403 (89.58%) of the teachers have undergone no training on Special Needs Education.

Looking at the number of trained teachers on Special Needs Education which is only 50 out of the 480 teachers within Rongo District are trained on Special Needs Education. From the District Education Officer interview schedule, it was noted that there are two special schools within Rongo District for the Deaf and for physically impaired or orthopedically impaired. Therefore, 21 out of the 50 trained teachers are in the special schools for the deaf while only 29 teachers have been deployed in the 34 schools within
Rongo District. Hence some schools lack teachers with these special skills which can facilitate communication within the classrooms for effective outcome.

Table 4.5 gives the numbers of subjects taught in schools compared to the number of lessons accorded to a particular teacher.

**Table 4.5 Subjects offered in School and the Number of Lessons**

<table>
<thead>
<tr>
<th>S/N</th>
<th>SUBJECTS OFFERED</th>
<th>NUMBER OF LESSONS/WEEK</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mathematics</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>English</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Kiswahili</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Biology</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Chemistry</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Physics</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>Agriculture</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>Business studies</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>Computer studies</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>History and Government</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>Geography</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>Religious studies</td>
<td>4</td>
</tr>
<tr>
<td>13</td>
<td>Music</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>13 SUBJECTS</strong></td>
<td><strong>65 LESSONS</strong></td>
</tr>
</tbody>
</table>

*Source: Teachers Questionnaire*

A teacher is accorded at least 28 lessons per week and is entitled to teach 2 subjects only. Hence, with only at most 1 teacher trained in special educational needs in relation to 13
teaching subjects, it therefore would mean that the other 11 subjects would not be taught effectively since the teachers responsible have no relevant skills in line with special educational needs as only a teacher in few of the schools are trained in special needs education. Thus the inefficiency of teaching and learning process in the inclusive classrooms.

Looking at the enrolment trends in Table 4.4 in earlier pages, the enrolment of students with special educational needs such as the orthopedically impaired, sight impairment, both totally impaired and partial impairment, while this is a positive move indicating that many children are taking advantage of inclusive education. It posses key challenges to principals in relation to the teaching and learning process. For these students, the textbook ratio is zero since there are no financial allocations for procurement of special facilities in inclusive schools as sourced from District Education Officer Rongo District hence there are no text books or any special facilities for these students with special educational needs. There are also no sections of the library in most schools for special education materials reserved as sourced from students’ questionnaire.

With no instructional material and proper infrastructure as indicated as the situation in most schools and as evident in the pictures posted below.
The number of lessons taught per teacher is as high as 50 lessons per week per teacher and this does not give room for individual differences to be catered for among the students with special educational needs as the teacher has trail of lessons. OECD (1967) states that "academic qualification professional experience, teaching materials and strategies classroom conditions all affect the efficiency of teaching and learning and pupils' performance."

The efficiency in the provision of inclusive education in these schools is unattained in fact is a 'dream' the government in relation with the Ministry of Education is yet to unravel. As per the current situation from field analysis the system is inefficient.

The table below indicates schools problems in relation to provision of inclusive education.
Table 4.6: Problems Related to the Provision of Inclusive Education

<table>
<thead>
<tr>
<th>Problems faced</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of classrooms</td>
<td>4</td>
<td>80.0</td>
</tr>
<tr>
<td>Inadequate learning resources (books)</td>
<td>5</td>
<td>100.0</td>
</tr>
<tr>
<td>Dilapidated facilities</td>
<td>5</td>
<td>100.0</td>
</tr>
<tr>
<td>No special facilities</td>
<td>5</td>
<td>100.0</td>
</tr>
<tr>
<td>Mobility problem</td>
<td></td>
<td>60.0</td>
</tr>
</tbody>
</table>

Source: Students Questionnaire

All the 5(100%) students with special educational needs per school indicated that inadequate learning resources, dilapidated facilities/structures and lack of special learning facilities are a major source of inefficient learning outcomes in these schools in relation to students with special educational needs. 4(80%) cited lack of adequate classrooms since the classrooms are already congested as a result of free secondary education and 3(60%) cited mobility problems as a result of lack of facilities to facilitate the movement of these students within the schools as proper infrastructure and wheel chairs for orthopedically impaired. Chesswas (1969) states that, “it is generally accepted that pupils need books, furniture and buildings and source should be deployed to provide them”. This situation is also evident in the ragged terrain and building entrances as indicated below
4.6 Training and Deployment of Teachers

The fourth Research Question asked: How many teachers are trained in special educational needs have been deployed to individual schools within the District?

Through the analysis of data on teachers specifically in relation to teachers qualifications and mobility of teachers as sourced from District Education Officer Rongo District, the data outcome is as below in Table 4.7.

Table 4.7 Deployment of Teachers within Rongo District for Inclusive Education

<table>
<thead>
<tr>
<th>Special school for the hearing impaired</th>
<th>Special school for orthopedically impaired</th>
<th>Inclusive classrooms</th>
<th>Inclusive classrooms</th>
<th>Inclusive classrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>4</td>
<td>22</td>
<td>6</td>
</tr>
<tr>
<td>42.0</td>
<td>10.0</td>
<td>4.0</td>
<td>44.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong> 50</td>
<td><strong>34</strong></td>
<td><strong>100.0</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: District Education Officer Interview schedule
The D.E.O. was asked to show how teachers with special educational needs training are deployed in various schools within the district. In response, it was confirmed that the district has two special schools of which one is for the hearing impaired which has a total of 21(42%) of the total number of teachers trained on special educational skills. Another one school which also offers a special unit for the orthopedically impaired has 5(10%) of the total number of teachers trained on special needs education. The remaining school offer inclusive education in regular classrooms and hence there are 4 schools with 2 teachers (4%) trained on special needs education. 22 schools have 1 teacher each which is (2%) to each school while the remaining 6 schools which also have admitted students with special educational needs lack trained teachers on special skills.

The above data is evaluated in relation to figure 4.2 which gives the total number of trained teachers on special educational needs at 50 teachers for the whole district as sourced from D.E.O. interview schedule. Therefore, this in relation to pupil teacher ratio as indicated in OECD (1967) "Deployment of teachers should take into account differences in teachers academic qualifications, pedagogical training, teaching methods, teaching materials and variations in classroom conditions”

Considering the number of teachers with the required pedagogical skills to teach the inclusive classrooms, the average number of 1 teacher per school of which some schools lack such teachers' is way below the efficiency mark.

D.E.O's source further elaborated that no teachers are trained in inclusive education and even special schools lack teachers. The negative attitude of teachers to train in line of special education is also a hindrance as teachers do not want to be associated with such disabilities.
Parents too are not free to take their children with special educational needs to school as they view disabilities as curse as their tradition puts it.

The Government has not taken inclusive education seriously as no funds are availed for its implementation. All these weighs down the efficiency in the provision of inclusive education in secondary schools as even parents are ignorant of such programmes in schools hence fail to support the schools. This information is sourced from DEO’s interview schedule Rongo District.

4.7 Possible Policy Strategies to Address the Factors Hindering the Provision of Efficient Inclusive Education

The fifth question asked: “What are the possible policy strategies that could be employed to address the factors hindering the efficient provision of inclusive education public secondary school”

DEO was asked to highlight on policy strategies that could address the factors hindering the provision of inclusive education in secondary schools. In response, the DEO proposed that the government should train teachers for inclusive classrooms, the government should aid schools to put up the right infrastructure and instructional materials for special educational needs through the provision of funds allocated specifically for special needs education.

The DEO also emphasized that parents should be sensitized on the importance of taking these children to school and not view it as a curse having a disabled child. Admission of these children to schools is decentralized too.
The DBO called upon sponsors such as well wishers, development partners and churches to assist the government to ensure that these children get the required education through the provision of funds for purchasing their special facilities or even provide/donate the facilities to schools by themselves.

The principals were also asked on the policy strategies to efficient inclusive education and in response, the below data analysis was tabled.

**Table 4.8: Principals Policy Strategies to Inclusive Education**

<table>
<thead>
<tr>
<th>Response From Principals</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government aid in construction of inclusive classrooms in proper design</td>
<td>28</td>
<td>82.35</td>
</tr>
<tr>
<td>Intensive funding of schools by the government for availing facilities</td>
<td>34</td>
<td>100.00</td>
</tr>
<tr>
<td>Adequate training of teacher’s</td>
<td>34</td>
<td>100.00</td>
</tr>
<tr>
<td>Integrate Assistive Technology through ICT in Education</td>
<td>19</td>
<td>55.88</td>
</tr>
<tr>
<td>Sensitization of all education stakeholders as parents on inclusive education</td>
<td>13</td>
<td>38.23</td>
</tr>
</tbody>
</table>

Source: Principals interview schedule.

From Table 4.8 above 28(82.35%) principals cited Government aid to schools in the construction of inclusive classroom in the required design for specialties. All the 34(100%) principals for 34 schools proposed intensive funding by the government to help in procuring facilities such as textbooks, Braille machines, wheelchairs and adequate teacher training on special educational needs to cater for special needs education and achievement of the required teachers student ratio at secondary level. 19(55.88%) principals cited the integration of assistive technology through the use of information communication technology (ICT) in education and 13(38.23) proposed sensitization of all
education such as parents, church and community as a whole on the importance of inclusive education.

4.8: DISCUSSION

Considering the above findings, the Ministry of Education in liaison rallying from students, teachers, parents and community as a whole require proper sensitization process that will enable all understand the real need for Education for all as has been noted that even some principals in schools do not allow some students with certain disabilities to study in their schools. Education is a basic Human right as elaborated in the United Nations charter on human rights and in line with this every child be given equal opportunities to school and professions. Let’s keep on telling students with these special educational needs that they can make it and Disability is not Inability.

From the findings one of the major problems that hinder efficiency in education is lack of appropriate resources. A national study by UNESCO (2005) established that most schools did not have adequate classrooms to accommodate the large number of pupils enrolled under free primary education. The classrooms were generally congested and there was hardly space for movement. The classrooms were in poor conditions, and lighting was poor as many classrooms depend on sunlight. The UNESCO (2005) recommended that the government should provide clear policy guidelines on how parents and communities could provide physical facilities like classrooms, toilets, desks and water tanks. However, emphasis must be made that no child should be locked out of school and suggested that part of the constituency development funds should be used to put up. Classrooms and toilets to provide pupils with a conducive learning environment.
Communities should be encouraged to raise funds to provide buildings and other physical facilities to schools. The use of assistive technology should be embraced for ease of internalizing learning experiences by the students with special educational
CHAPTER V
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter, a summary of the study is presented together with a summary of the key study findings. The chapter also presents a conclusion of the study, recommendations and suggestions of studies that could be carried out in future.

5.2 Summary of the Findings

This study assessed the efficiency in the provision of inclusive education in public secondary schools in Rongo District. The study was conducted in all 34 secondary schools within Rongo District. All the 34 principals were engaged in the interview conducted by the researcher. Two teachers per school responded to questionnaires designed by the researcher giving a total of 64 teachers. All students with special educational needs responded to questionnaires designed by the researcher and DEO Rongo District also was interviewed by the researcher using questions designed by the researcher from the DEO’s interview schedule.

Literature was reviewed relating to integration of students with special educational needs in regular school, special needs issues, resource availability to students with special educational needs, instructional planning for inclusive classrooms, and student enrolment rates as well as findings of previous studies carried out in relation to special educational needs and inclusive education. The results of the study indicates that the education stakeholders such as parents, students, teachers, DEO were facing key problems in the
process of implementing inclusive education in secondary schools in Rongo District. The research findings are as summarized below.

5.2.1 Enrolment Trends of Students with Special Educational Needs in Regular Schools

Table 5.1 Enrolment Trends of Students with Special Educational Needs

<table>
<thead>
<tr>
<th>Year</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>64</td>
<td>32</td>
</tr>
<tr>
<td>2008</td>
<td>73</td>
<td>36.5</td>
</tr>
<tr>
<td>2009</td>
<td>73</td>
<td>36.5</td>
</tr>
<tr>
<td>2010</td>
<td>51</td>
<td>28.</td>
</tr>
</tbody>
</table>

Source: Principals Interview schedule

The table above shows the declining trend in enrollment of students with special educational needs. In relation to enrolment trends of students with special educational needs in regular schools, the following problems were faced. In admission to school, only few students of averagely 5 seek admission to school which is less than the number available for such cases at the district public health facility. The parents also contribute to low enrolment as they hide their children with disabilities at home for fear of being ridiculed and termed people with curses as according to African traditional values giving birth to a disabled child is considered a curse and hence punishment as a result of previous wrong doing by the family.
5.2.2 The Retention and Completion Rates of Students with Special Educational Needs.

Table 5.2 completion Rates of students with special educational needs

<table>
<thead>
<tr>
<th>Year</th>
<th>Grade enrolment</th>
<th>Completion rates</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>20</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>2008</td>
<td>22</td>
<td>6</td>
<td>27.27</td>
</tr>
<tr>
<td>2009</td>
<td>23</td>
<td>6</td>
<td>26.87</td>
</tr>
<tr>
<td>2010</td>
<td>25</td>
<td>5</td>
<td>20</td>
</tr>
</tbody>
</table>

Source: principals interview schedule

There is a declining trend in students with special educational needs who completed secondary school education hence, in relation to retention and completion rates of students with special educational needs in regular schools, the teacher and principals record very low rates which depict an inefficient level of education. These low rates were as a result of the inadequate resources to deal with special educational needs ranging from lack of trained personnel/teachers in line with special educational needs, lack of financial allocations by the government for procurement of special facilities to facilitate learning in inclusive classrooms.

This has hindered the efficiency in the provision of inclusive education since personnel and facilities were not availed to facilitate their teaching and learning.
5.2.3 Resource Availability to Teachers and Students for Efficient Teaching and learning process

Considering the equipment of teachers and students to inclusive classrooms, it is noted that the pupil teacher ratio was not adhered to. A larger percentage of teachers are not trained on special educational needs and the teaching equipments are not availed in relation to text books, proper building designs and mobility facilities for both the orthopedically impaired and sight impairments. The teachers and students are therefore poorly equipped for efficient inclusive education.

5.2.4 Teacher Training and Deployment

The study established that not enough teachers had been trained for effective provision of inclusive education of which half of the number of trained teachers on special needs education are deployed to special schools within the District, this means that some schools do not have teachers trained on the required skills in relation to special needs education raising the pupils teacher ratio for inclusive classrooms. The negative attitude of teachers of not wanting to teach students with disabilities also contribute to the low number of trained teachers on special needs education.

5.3 Conclusion

This study further established that the principals and teachers face great problems in the process of implementing inclusive education as some do not even understand the term “inclusive education and implement it unknowingly when they admit students with autism, partial blindness, physically impaired and mentally handicapped.
Schools do not have adequate funds to procure special facilities to cater for the students with special educational needs. Teachers have not been trained to handle inclusive classrooms which contain the hearing impaired since they are not trained in sign language and the blind since they have no training in Braille machines or any other assistive technology in line with special educational needs.

The building designs do not allow for free mobility of students with special educational needs especially the orthopedically impaired. Parents do not take their children to school since they view disability as a curse shunned by the community. This shows how the community has also neglected its role in education and left every responsibility in the hands of the government.

Some of the coping strategies employed by principals to deal with these problems have hindered even the attainment of education for all goal as some always advise some cases of specialities to get admission in special unit schools which most parents can not afford due to poverty while other students rely on their students colleagues support during learning process. It is hence the contentions of the researcher that the success of the inclusive education will largely depend on aggressive sensitization campaigns to enable all stakeholders in education understand their roles in the provision of inclusive education and this will debunk the idea that the government is the only body that should take full responsibility over inclusion.

The government should provide textbooks and other teaching and learning resources including teacher personnel but parents and community, sponsors and donors should support schools in this line too with regard to putting up properly designed classrooms for inclusive education.
5.4 Recommendations

i. The community which includes parents should be sensitized on her role in ensuring success of inclusive education. Parents to be made to understand that giving birth to disable child is not a curse hence they should expose these children to all the opportunities available in the country in education in order to maximize their potentialities.

ii. There is need for all secondary school teacher to receive in service training in special educational needs and for those joining the fresh training, a common unit should be designed on special educational needs especially on sign language and Braille machines and reading of Braille text books.

iii. The government should allocate funds to schools to help in procuring special facilities for special needs education such as talking books, taking calculators, Braille machines and computers for ICT in education. The government should also increase fund allocations to schools especially those from regions without adequate resources. CDF and LATF funds should be channeled to public schools to aid in development project such as building of properly designed classrooms.

iv. The trained teachers should be posted to various schools putting into consideration the pupil teacher ration and number of lessons taught per subject.

v. Policy guidelines to be formulated and implemented to the letter decentralizing the system of admission of students with special educational needs for efficiency to be realized in the provision of inclusive education.
5.5. Suggestions for Further Studies

i. A similar study should be carried out in other districts in the country to find out problems that exist and determine way forward to be employed in the provision of inclusive education.

ii. An evaluation should be done on the Government funding system to inclusive education.

iii. A case study should be conducted in countries in Africa and those outside Africa which have successfully implemented inclusive Education for any appropriate innovation in the Kenya’s situation.
REFERENCES


LETTER OF INTRODUCTION TO THE PRINCIPALS

Dear Sir/Madam, Principal

REF: REQUEST FOR RESEARCH

I am a master student at Kenyatta University. I am required to submit as part of coursework assessment a research project report on assessment of efficiency in inclusive education on public secondary schools in Kenya.

To achieve this, your school has been selected for the study and the information will be used purely for academic purposes only and your name will not be mentioned on the report.

Findings of the study shall upon request be availed to you.

Your assistance and cooperation will be highly appreciated.

Thank you in advance.

Yours faithfully

Lucy Akinyi Eunice

E55/CE/15556/2008

Department of Educational Management, Policy and Curriculum Studies, Kenyatta University.

75
APPENDIX II

INTERVIEW SCHEDULE FOR THE PRINCIPALS

The research findings will be used purely for academic purposes only and your name will not be mentioned on the report.

SECTION A

1. What is your role as a school principal with regard to teaching and learning process within your school?

2. Is your school involved in the implementation of inclusive education?

3. Do you have trained teachers in the special educational needs?

4. What are the academic qualifications of these teachers?

5. When did your school start implementing inclusive education?

SECTION B: ENROLMENT AND ADMISSION

1. How many streams has your school had since 2008?

2. What is the average number of pupils per class?

3. Are there students with special educational needs in these classes?

4. How many in total?

5. Which class has the majority of students with special educational needs?
6 Out of the total number of these students enrolled in form one, what is the average number that complete fourth form annually?

7 How many years do these students with special educational needs take in school to graduate?

8 What are the problems you face in admission?

SECTION C: PHYSICAL FACILITIES

1. Are there enough financial allocation to these students to help in availing the special equipments needed in their teaching and learning process?

2. Who provides the required equipments and other learning material for these students?

3. What type of equipments is available in your school for the students with special educational needs? In order to facilitate their efficient learning process in the inclusive classrooms.

4. What is the ratio between the learning resources available to these students per class?

5. How many classes do you have for inclusive programmes?

6. Are these classes fitted with the right facilities for the students with special educational needs?

7. List other problems you face in the provision of inclusive education in your school?

SECTION D: HUMAN RESOURCE-TEACHER PERSONNEL

1. What is the total number of teachers in your school?
2. How many of these teachers are trained in special needs education?

3. Does your school have enough number of teachers to effectively and efficiently implement inclusive education?

4. How do you cope with teacher shortage in providing inclusive education efficiently?

5. Have you and your teachers attended any in-service course on inclusive education?

6. State the problems in relation to the provision of inclusive education in your school?

SECTION E: POLICY STRATEGIES

Highlight on policy strategies that could be employed to address the factors hindering efficient provision of inclusive education in public secondary school?

THANK YOU
APPENDIX III

INTERVIEW SCHEDULE FOR DISTRICT EDUCATION OFFICER IN RONGO DISTRICT

The research findings will be used purely for academic purposes only and your name will not be mentioned on the report.

SECTION A

1. What is your role as a district Education Officer with regard to public secondary school in the district?

2. How often do you interact with the principals of public secondary schools?

3. Are you aware of inclusive education implementation in the country?

4. How many schools in your district have implemented inclusive education?

5. What major challenges do these teachers face in the implementation of inclusive education in public secondary schools? In terms of instructional and infrastructure materials.

6. What problems are the principals facing when assigning teachers to teach the inclusive classrooms?

7. How many teachers within the district have been trained on special needs educational skills?

8. What are the possible solutions to problems with regard to admission, enrolment, transition and completion with the implementation of inclusive education in the resource availability with regard to efficiency in the provision of inclusive education?
9. Highlight on policy strategies in place to address the factors hindering efficient provision of inclusive education in public secondary schools?

THANK YOU
APPENDIX IV

QUESTIONNAIRE FOR THE STUDENTS WITH SPECIAL NEEDS

The research findings will be used purely for academic purposes only and your name will not be mentioned on the report.

SECTION A

1. In what form are you?

2. What is your sex? Specify as appropriate by a tick (✓)
   
   Male [ ] Female [ ]

3. Do you feel comfortable being integrated in regular schools?
   
   Yes [ ] No [ ]

4. Are disabled students assisted by their normal peers in class?
   
   Yes [ ] No [ ]

5. What is the general attitude of normal students towards students with special needs in class? Briefly explain.

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

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

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

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

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

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


81
6. Are students with special needs stay in their own camps in school?

Yes [ ] No [ ]

7. Give the advantages of integrating normal students with students with special educational needs in mainstream schools.

8. All the teachers need to be trained on special education needs (comment briefly).

9. What type of special assistance do you require in Education to facilitate your learning in school?

10. Would you prefer to be in Special School than going through the Inclusive Process? Comment Briefly.
SECTION B: PHYSICAL FACILITIES

1. Mention some of the equipments available in your school for special Educational needs?

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

2 (a) Does a section of your library has resources for Special Educational needs?

Yes □ No □

(b) If yes, Mention these resources...........................................................................................................
..............................................................................................................................................
..............................................................................................................................................
..............................................................................................................................................

3. Comment briefly on the availability of these resources to student’s population?

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

SECTION C: POLICY STRATEGIES

Highlight on the policy strategies you would want implemented for efficient provision of inclusive education in Kenya........................................................................................................
..............................................................................................................................................
..............................................................................................................................................
..............................................................................................................................................

THANK YOU.
APPENDIX V

QUESTIONNAIRE FOR TEACHERS

The research findings will be used purely for academic purposes only and your name will not be mentioned on the report.

SECTION A

1. Your gender
   Male [ ]   Female [ ]

2. Academic qualifications *(Tick as appropriate)*
   [ ] Bed   [ ] Dip/Ed
   [ ] Med

3. a) Is your school involved in the provision of inclusive education?
   [ ] Yes   [ ] No

   b) If Yes, give the year which your school started its implementation.

4. What is your experience as a teacher in the provision of inclusive Education in the integrated classrooms? *(Comment it briefly)*

........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
........................................................................................................................................
SECTION B: ENROLMENT AND ADMISSION

1. Your school had how many streams in:

   (i) Year 2008

   (ii) Year 2009

   (iii) Year 2010

   (iv) Year 2011

2. What is average number of pupils per class?

   [ ] 10 – 19  [ ] 20 – 29

   [ ] 30 – 39  [ ] 40 and above

3. a) Are there students with special educational needs in these classes?

   [ ] Yes  [ ] No

   b) If Yes, how many in total?

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

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

4. Out of the total number of these students enrolled in Form one, what is average that complete fourth Form yearly?

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

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

   85
5. How many years do these students with special educational needs take in school to graduate?


SECTION C: PHYSICAL FACILITIES

1. Are there enough facilities/equipment used in the facilitation in the teaching and learning process of students with special needs? (Comment briefly)


2. What type of equipment are available in your school for these students? (Mention the equipments)


3. What is the ratio between the learning resources available to these student per class?


4. Are the classes fitted with the right facilities for the students with special needs?

[ ] Yes          [ ] No
5. List other problems that you face in the provision of inclusive education in the inclusive classrooms?

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

SECTION D: HUMAN RESOURCE - TEACHER PERSONNEL

1. How many teachers are trained in the special education skills?

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

2. Does your school have enough number of teachers to effectively and efficiently implement inclusive education?

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

3. Have the teachers attended any in-service course on inclusive education?

[ ] Yes  [ ] No
SECTION E: POLICY STRATEGIES

Suggest on policy strategies that could be employed to address the factors hindering the efficient provision of inclusive education in your school?

THANK YOU.
# APPENDIX VI

## TIME SCHEDULE

<table>
<thead>
<tr>
<th>Activity</th>
<th>Feb-Mar</th>
<th>April-May</th>
<th>September</th>
<th>Sep-Oct</th>
<th>November</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature Review</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposal writing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data collection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Report writing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submission</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## APPENDIX VII

### RESEARCH BUDGET

<table>
<thead>
<tr>
<th>BUDGET ITEM</th>
<th>AMOUNT (KSHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Research Instrument</strong></td>
<td></td>
</tr>
<tr>
<td>Typing 5 pages of instruments @ 80 per page (80kgs)</td>
<td>400</td>
</tr>
<tr>
<td>Photocopying 50 pages of instruments per page (50x5)</td>
<td>250</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>650</strong></td>
</tr>
<tr>
<td><strong>2. Research Proposal</strong></td>
<td></td>
</tr>
<tr>
<td>Typing 50 pages at 80 per page 80x50</td>
<td>4000</td>
</tr>
<tr>
<td>Photocopying 50 pages @ 5 by 6  50x6</td>
<td>1950</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>5000</strong></td>
</tr>
<tr>
<td><strong>Project</strong></td>
<td></td>
</tr>
<tr>
<td>Typing approximately 150 pages at 80 per page</td>
<td>12000</td>
</tr>
<tr>
<td>Photocopying 150 pages at 5 by 10 copies</td>
<td>7500</td>
</tr>
<tr>
<td>Binding 10 copies at 500 each</td>
<td>5000</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>24500</strong></td>
</tr>
<tr>
<td>Transport to field for 15 days at 300 per day</td>
<td>4500</td>
</tr>
<tr>
<td>Lunch during field work for 15 days</td>
<td>3000</td>
</tr>
<tr>
<td>Miscellaneous costs</td>
<td></td>
</tr>
<tr>
<td>Costs of stationary and other contingencies</td>
<td>3000</td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td><strong>42000</strong></td>
</tr>
</tbody>
</table>