VIEWS ON THE CONTRIBUTION OF POLICY SHIFT ON PERFORMANCE OF SECONDARY GIRL STUDENTS IN SCIENCE SUBJECTS: A Case of Ileje District Council

By

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CERTIFICATION

We, the undersigned, certify that we have read and hereby recommended for acceptance by Mzumbe University, a dissertation entitled **Views on the contribution of Policy shift on performance of Secondary Girl students in science subjects: A Case of Ileje District Council** in partial fulfillment of the requirements for award of Master of Arts in Education at Mzumbe University.

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I, Mokami M. Chacha, declare that this thesis is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

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ACKNOWLEDGMENT

It is not unusual for someone to be proud and blissful for making a certain success. This is very realistic on my side. The period takes this study makes me to realise this joy has come to an end. However, the accomplishment of this thesis is a result of collective efforts of many people whom my joy will have no meaning if I fail to accord my heartfelt appreciation for their support.

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LIST OF ABBREVIATIONS AND ACRONYMS

BRNEd	Big Result Now in Education
CSEE	Certification of Secondary Education Examination
CG	Capitation Grants
DSEO	District Secondary Education Officer
ESR	Education for Self Reliance
ETP	Education and Training Policy
ESDP	Education Sector Development Programme
FFE	Free Fee Education
FGD	Focus Group Discussion
GSCE	Gender Social Class Evaluation
ICT	Information Communication and Technology
NGOs	Non-Government Organization
MDGs	Millennium Development Goals
PSLE	Primary School Leaving Examination
PISA	Programme International Students Assessment
SEDP	Secondary Education Development Programme
SDP	Sustainable Development Goals
SSA	Sub Saharan Africa
UNESCO	The United Nations Educational Scientific Organization
UNICEF	United Nation International Children Emergency Fund
UK	United Kingdom
URT	United Republic of Tanzania
UPE	Universal Primary Education
WB	The World Bank

ABSTRACT

The study examined the contribution of SEDP, BRNEd and FFE on performance of secondary school girls in science subjects at Ileje District from 2011 to 2017.The study focused on descriptive case study design. The study involved 87 respondents sampled by simple random and purposive sampling techniques. Data were collected using questionnaire and interview methods. The study findings revealed that in the period of implementing SEDP education stakeholders like policy planners, government, policy makers did not initiate the strategies direct specifically on academic performance of girl students in science subjects but its SEDP has slightly contributed indirectly in laboratory construction, classroom building though not in good standard. Also, findings indicate that BRNEd go some extent contributed in improving academic performance even if this policy was not directed specifically for improving performance of girl students who studied science subjects like physics, chemistry and biology but its initiatives and strategies of improving performance affect girls indirect way. This evidenced by looking performance of girl students from NECTA result indicated that from the period of implementing BRNEd girl students at least in specific subjects few of them scored grade B, C and D allow them to continue with further studies contrary to previous policy which is SEDP. Fee Free Education also aimed at increasing enrolment rate of girls in community secondary schools but its contribution in academic performance especially for girls who studied science has not yet seen this is reveled from NECTA result in which performance of girls in specific science subjects was very poor at selected four secondary schools particularly in Ileje district council. It recommended that government of United Republic of Tanzania should make sure to involve science teachers in short term course programme that aimed at providing knowledge about what, how and when to implement policy intervations immediately before the process of implementing started. Also the government should conduct different seminar which focused on providing knowledge to educational stakeholders including science teacher, students and parents and others to ensure effective contribution of SEDP, BRNEd and Free Fee Education on improving academic performance of secondary schools girls students in science subjects including physics, chemistry and biology. Government should realocated some of percentage that could used to motivate girls students who pass well in science subjects including physics, biology and chemistry. Inadquate of learning facilities compared to the number of students, it recommended government should increase Capitation Grants (CG) with regarding specific school demands so that to fulfil its requirements and the government should formulate a policy which could support girls students in studying science subjects.

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PROBLEM SETTING

1.1 Introduction

This study aimed at examining the contribution of SEDP, BRNed and Fee Fee Education Policy in academic performance of secondary school girl students in science subjects in Ileje District Council from 2011 to 2017. Different studies show that show that the performance of girls in science subjects such physics, chemistry and biology was too poor due to various reasons due to that has been the fact that this study aimed to address the problem by identifying the contribution of SEDP in academic performance of secondary school girl students in science subjects in Ileje District Council between 2011 and 2015.

To determine the contribution of BRNEd in academic performance of secondary school girl students in science subjects in Ileje District Council from 2013 to 2015 as well as finding out the contribution of Free Fee Education Policy on academic performance of secondary school girl students in science subjects in Ileje District Council from 2016 to 2017 in addressing this could be a panacea for nation development, the whole world through respective nations struggles to invest much their income in developing the education sector. Essentially, the discussion in the background focuses on probing the usefulness of different education policy innovations in promoting performance of girls in secondary school in science subjects.

The chapter introduces the study into eight sections including introduction of the chapter, the background of the problem, statement of the problem, objectives of the study, research questions, and significance of the study, the limitation of the study and scope of the study. The background of the study reveals essential elements related to the problem study which is policy change in education and academic performance of secondary school girls in science subjects and interventions of policy programmes.

1.2 Background to the study

Over three last decades, different countries in the world have strived to implement various policy interventions that could help address challenges facing education sector. Those executed Policy interventions in education play essential role in provision of quality education and ensures good performance to the majority students. Both developed and developing countries including Tanzania have engaged so far accomplish intended goals and objectives of policy assigned tasks. Under normal circumstance, performance can be measured by internal assessment which done through making text, quiz, annual examinations and national examinations done by students under supervision from nation, region, district and school levels (Hornby, 2000). If the government sought to improve the quality of education through the innovations within a policy, then the quality education is partly measured by judging performance of learners in specific subjects.

With the need to impact on education quality delivery, different nations in the world met to make international declarations in view of advocating for policy changes. Some of the initiatives emerged to deal with development including education matters was the Millennium Development Goals (MDGs) replaced by current Sustainable Development Goals (SDGs). These conventions emphasize on the need for the governments to ensure the provision of quality education for all and promote lifelong learning environment for all children despite of their social economic barriers. These declarations laid the foundation of different countries in Africa sought to review their policies in the education sector. In Africa for instance countries like Uganda, Malawi, Zambia, Kenya, Cameroon, Ghana, Rwanda and Tanzania embarked on implementing inclusive policies like the Free Education Policy by removing school fees in public primary and Secondary Schools as well as improving quality of education (Kattan, 2006).

In Tanzania the issue of policy shift in education sector is dynamic means change a year after another. Since independence, the government has undergone a number of policy changes depending on the need of the time. Notably, the Education for self-Reliance policy of 1967 and the universal Primary Education (UPE) in 1970 were the main policy interventions meant to respond to the needs of the nations through

education delivery. The education for self - reliance policy for instance sought to impart in the mind of learners' sense of patriotism, ability to actively fit in the needs of the environment through hard working spirit in their completion of the studies.

In accordance to the philosophy behind ESR, performance could be measured by the ability to work and respond to the national demands of self-sustenance in the fight against the three giant enemies, namely ignorance, poverty and diseases (Nyerere, 1968). Meanwhile, the introduction of UPE sought to widen the ground for basic education access for the sake of reducing the rate of illiteracy. Here, the performance of a student could be judged through the ability to read, count, and write, though it was not limited to such basics only (Rakesh, 2006).

Moreover, in 1995 government established Education and Training policy with the plan to prepare future intellectual active people fit to his or her own environment. The policy put more consideration in science and technology (URT, 1995). The government sought that science and technology aspects play most significance part for whole life in the society for useful, accomplishment, materials gains and clear organize methods for giving more details (URT, 1995) This create special attention to the Government under the Ministry of Education to prepare curriculum and create friendly environment that assist and promote students in studying science subjects hence to improve performance in science subjects.

Recently the government made some policy review and came up with the new Education and Training policy of 2014. The policy essentially meant to correct and if not to change the focus of national education delivery in terms of quantity and quality. Bearing to its effective implementation, the ETP 2014 accommodated some policy programmes which were undertaken under the former policy of 1995 through ESDP 2008 - 2017. The ESDP functions in both primary and secondary Education, but since our focus is on secondary education the discussion will basically explain on the following programmes: Secondary Education Development Plan phase two (2010 - 2014 SEDP), Big Results Now in Education (2013 - 2015 BRNEd) and Free Fee education programme (2016 - 2018 FE) which is currently under implementation (URT, 2012).

In Tanzania, the issue of policy change in education sector was also expected to bring about the improvement to student's performance particularly in secondary schools. The SEDP II was established in view of functioning from 2010 - 2014 for the sake of correcting the shortcomings of the SEDP I. The rationale for the establishment of SEDP II were many among them the issue of poor performance of CSEE formed a part. The need to focus on the enhancement of access and equity was the second in the list of the targets of the SEDP II. It vowed to increase the level of promotion of A 'level especially in science subjects, improve girls' participation and performance at all levels and finally increasing rate of enrollment to secondary school for all children with particular attention the marginalized groups and the disabled children (URT, 2010).

Also SEDP planned mainly for provision of quality education al Tanzanians children in general but not specific for performance of girls in science subjects. The government aimed to overcome learning and teaching challenges and seek to attain the intended outcomes by facilitating the teaching work force particularly in science subjects and quality of education, improvement in the standards of assessments and proper school funding through adequate disbursement of capitation grants to secondary schools and improve the learning environment.

The programme similarly sought to build more libraries and laboratories in secondary schools to facilitate the reforms in education sector. New classrooms were constructed together with latrines for the sake of reducing overcrowding of students. Deliberate efforts were made to deploy more quality teachers particularly those specialized in science subjects, mathematics and English language (URT, 2010, Hakielimu, 2013).

Together with the efforts made by the government to deliver quality education as stated in different policy documents, the problem still prevailing. In addition, issue of equity is as well mentioned in the level of education access and ensuring the input strategies which will pave way the increase of girls in schools. In some occasions for instance the SEDP II document made a deliberate intention to improve education outcomes of secondary school students in science subjects, however, the statements

are normally very general with less precision to girls' issues. The policy silence in deals with girls' performance calls for a special attention.

Overwhelmed by the pressure to improve the level of learning achievement in national examination results, the government introduced another new intermediary programme which was sought to bring more changes with a supersonic speed. The Big Results Now in Education (BRNEd) programme was adopted in 2012 from the far East. The introduction of the BRNEd paralleled to the SEDP II, but was not tied to education sector only. The need was to seize the objectives of the education sector within the framework of time. The need to improve education quality in primary and secondary schools and the way forward toward the attainment of this objective was through regulating performance indicators for form II and IV examination Grades (Jesse & Asim, 2014). The indicators were set for reading competence, numeracy competence and science subjects pass rate.

Free education policy put into implementation in 2016 before, its implementation there was a strong feeling that, a significant portion of students failed to complete secondary education due to costs associated to school fees, high contributions from the parents and others related costs for buying school uniforms, books, mid-day meals and other school requirements (Hakielimu, 2017). Scholars agreed that, cost sharing in education is one of the constraints in stipulation the education to the children for parents of low income level and hinder provision access of quality education in the government (Ockech & Rollestone, 2009). Then, Tanzania government recognizes the problem of cost sharing in education and decides to provide free education extended to Ordinary level of secondary school. With effects, now a Tanzanian child can enjoy 11 years of Free Education in Tanzania from Primary to Secondary school levels (Hakielimu, 2017).

Although the policy shifts through SEDP, BRNEd and FFE in education aimed at improving academic performance for secondary school students' science subjects; there is a decline in general performance for secondary school students in science subjects. Evidences could be drawn following the results of three years. In 2009 the pass rate of science subject was reported to be 72.5%, in 2009, 50.4% in 2010 and

then reached to 34.5% in 2012 of all students who took science subjects (Hakielimu, 2013, URT, 2011). The greater emphasis of this study is to familiarize with the performance secondary school girls in science subjects from 2014 to 2016.

While the results portray an alarming note which calls for the special attention, different scholars have generally associated the problem of poor performance with factors like low retention, poor parental relational treatment, association with wrong peers, low motivation of pupils in achievement, low motivation and truancy (Aremu, 2000; Aremu & Sokan, 2003).

Experience demonstrates that the performance of science subjects in secondary school has been declining, student showed a sense of disinterest from studying science subjects (Mhaiki, 2006). The lack of motivation to study science subjects reflected the reality on the ground whereby the pass rate of science subjects in national examinations particularly for the Certificate of secondary Education Examination (CSEE) were relatively poor (Hakielimu,2013). The schools associated factors for poor performances of girls are like, inadequate science teaching and learning facilities such laboratory equipment and lack of qualified teachers (URT, 2010).

1.3 Problem Statement

Various policy interventions for improving quality of secondary education have been implemented in Tanzania. Among others include SEDP, BRNEd and FFE. The increased trend in the shift from one Policy intervention such as SEDP to another one such as BRNEd and consequently FFE policy, have a number of positive outcomes in schools such as increased enrollment, increased number of secondary graduates, raised number of teachers as well as school infrastructures. Despite the increased trend of existence of policy shift from SEDP, BRNEd to Free Fee Education policy, for more than two decades now in Tanzania, little is known in terms of their contribution to the academic performance of secondary girl students especially in science subjects.

Available statistics obtained through DSEO Secondary Education January, 2018) in Ileje District, for example, show that over the last three years (2015/16 to 2017/18) the performances of secondary school girls in science subjects have been decreasing. Failure to address those effects will pose effects to career paths of girls and nation at large. Some studies have provided some lights on the underlining factors for poor performance of students (Aremu, 2000; Aremu & Sokan, 2000; Kivenule, 2015). Some of studies came out with factors affecting performance including; parental treatments, mob psychology, low motivations, truancy, poor school infrastructures, mismanagement of class interactions and government policy changes as the pro factors for the decline of performance for students studying science subjects. However, none of these scholars focused on academic performance with specific intention to know how policy shift have been influencing performance of secondary school girls in science subjects.

In consideration of the need to improve performance of girls in science subjects this study intends to examine the contribution of SEDP, BRNEd and FFE on performance of secondary school girl's in science subjects from 2011 to 2017 using Ileje District Council as a case study. Despite the famous achievement of the SEDP II, BRNEd and FFE in improving enrolment of students, and quality of education in Tanzania, little is known about their contribution on performance of girl's students in secondary science subject. Does policy shift seek to improve performance of students in science subjects especially girls in secondary schools? The educational policies have been there and being changed over time in Tanzania but still the problem of academic performance in science subjects for girls is currently experienced. This tends to raise the serious problem for girls' performance in science subjects in Tanzania in the perspective of policy shifts. For that reasons generally, this study precipitated its interest to see if there is relationship between policy shift and performance of girls in science subjects.

1.4 General Objective of the Study

To examine the contribution of SEDP, BRNEd and Free Fee Education Policy in academic performance of secondary school girl students in science subjects in Ileje District Council from 2010 to 2018.

1.4.1 Specific Objectives

i. To identify the contribution of SEDP in academic performance of secondary school girl students in science subjects in Ileje District Council between 2011 and 2015.
ii. To determine the contribution of BRNEd in academic performance of secondary school girl students in science subjects in Ileje District Council from 2013 to 2015.
iii. To find out the contribution of Free Fee Education Policy on academic performance of secondary school girl students in science subjects in Ileje District Council from 2016 to 2017.

1.5 Research Questions

i. To what extent do SEDP enhance academic performance of secondary school girl students in science subjects in Ileje District Council between 2011 and 2015?
ii. What is the contribution of BRNEd in academic performance of secondary school girl students in science subjects in Ileje District Council between 2013 and 2015?
iii. What is the contribution of Free Fee Education Policy on academic performance of secondary school girl students in science subjects in Ileje District Council from 2016 to 2017?

1.6 Significance of the Study

The results of the study will benefit different education stakeholders such as decision makers at various levels of governments, policy makers, researcher, parents and school bodies. The body of knowledge on women empowerment theory has been added in this study. This study is very significant in adding up the knowledge in the body of literature and scholarly research work in the future. The theoretical and empirical framework of this study is a good reference in other future researchers regarding education reforms particularly the ones covered in this study.

In policy review this study will create the knowledge based to education stakeholders like government, teachers, parents in respective and other community, about the measures which supposed to be taken in improving academic performance in science subjects so that to prepare a nation which has a lot scientist in our generation especial for women.

Though the policies intervention revealed the academic performance of girl students studying science subjects in Tanzania context specifically in Ileje district council better strategies should formulated to favour girl students to perform excellence in science. Also in the other side of science teachers will empowered so that to be supported by provision those necessary facilities which will enhance teaching and learning so that to bring positive outcomes in academic performance of girl students in science subjects such as physics, chemistry and biology**.**

The parents will aware of the extent of government support toward Free Fee Education in secondary schools and make them adequately prepared to meet their responsibilities regarding improvement of academic performance in science subjects to their children specifically for girl students. The policy makers will use this findings so that to ensure adequate fund in financing academic issue including performance of secondary school girl students in science subjects.

Administrators and secondary teachers could use this information so that to make evaluation about the contribution of policy intervention on academic performance and address some of constraints facing academic issues in science subjects including physics, chemistry and biology and make amendments.

1.7 Limitations and Delimitation of the Study

1.7.1 Limitations

In any field work the investigator or researcher to face the limitation is inevitable thing but the kind of limitation differ depends on geographical location of a place where field work was conducted. Simon (2011) pointed out that limitation is some kind of likely restrictions that appeared in the field study out of the research plan this may happen before or during the excise of conducting the research.

One of the limitations in this study was funds, fund is a part and parcel in whole process of conducting research that enabled the researcher to accomplish the work for instance fund is used for transport from one place to another, fund is also needed paying for stationeries. Insufficient fund therefore, hinder all activities of conducting the research. This situation affect in psychologically.

Study participants were not ready to be interview in order to allow them to participate during interview session the researcher had to guarantee confidentiality among them and tell them the purpose of conducting the research and information being gathered were used for research purpose only.

Language barrier is another problem faced the researcher during the work of conducting research. Most of study participants in respective community did not know Kiswahili language most of the time they communicate with each other by using two vernaculars language such Kindali spoken by Wandali tribe and Kilambya spoken Walambya tribe. The problem in language barrier forced the researcher to employ translator who knows both language so that to translate the words spoken by the study participants into Kiswahili language.

Time management is another limitation encountered the researcher in the field work, sometime researcher have an appointment to meet with some participant in a particular respective community or school but on that time when the reach at place found that no one already come and the research decide to wait them until they come. To solve this, the researcher used polite language to ask for requesting them so that to keep time.

Another limitation found in kind of study design that in descriptive case study design a lot of information or facts gathered depends on the view of study participants in select ward within a district, for that reason the findings result could not workable at universal like Belgium, USA and Polland due to the fact that, each country has her own income, philosophical beliefs, the way people live which is differ to our country.

Little knowledge regarding policy interventions like SEDP, BRNEd and Fee Free Education this lead most of study participants failed give their contribution concerning the study phenomenon. Thus in order to obtain facts or information from field participants and allow them to participate in fully the research ought to use a few minutes explain policy interventions in brief at list to make them aware.

Moreover, the study participants were not ready to fill questionnaires in right time this forced researcher to go back again to collect questionnaires in the following day. Study participants lack an ability to provide profound link between the relationship of policy shift in academic performance of girl students in science subjects and their willingness to participate free was a tentative limitation for the accomplishment of the study, the reason is that selected schools teachers were very busy for monthly test examinations.

Climatic condition was another limitation faced the researcher, that research activities occurred during in raining seasonal in which restricted the researcher to predict and plan specific time and day started for research especial in two selected schools allocated interior part in the district like Ibaba and Lubanda so to save time the researcher started with 2 selected secondary school allocated around town side.

1.7. 2 Delimitation of the Study

This study examined the contribution of SEDP, BRNEd and Fee Free Education Policy in academic performance of secondary school girl students in science subjects in Ileje District Council from 2011 to 2017. The study also was carried out in four (4) selected secondary schools such Ibaba in Ibaba ward, Itumba in Itumba ward, Nakalulu in Isongole ward and Lubanda in Lubanda ward particularly in Ileje district council found in Songwe Region. The study participants including District School Inspectorate, District Secondary Education Officer (DSEO) Head of schools, Academic teachers, Science teachers, Girl students studying science subjects from form three and four and parents in respective community as one of participants targeted in the study.

1.8 Organisation of the Dissertation

This study comprises of six chapters, chapter one consists of problem setting, background of the problem, problem statement, research objectives, research questions, significance of the study, limitations of the study, delimitation of the study, and summary of chapter of chapter one. Chapter two, comprises of literature review, definitions of key concept, review of policy intervention in education, theory of the study, empirical literature review, the research gap in literature, conceptual framework, summary of the chapter two. Chapter three presents research methodology used in the field of the study, population of the study, sampling technique and sample size , source and methods of data collection, data analysis , reliability and validity of data, ethical consideration, chapter summary. Chapter four contains presentation of findings. Chapter five consists of data analysis and discussion of findings and chapter six contains summary, conclusion and policy implications or recommendation.

1.10 Summary of Chapter One

The chapter look the historical background of policy shift in the world wide in both developed countries and developing countries including Tanzania and also understand the encountered the policy shift and how to address them. Thus, academic performance of secondary school girl students in science subjects like physics, chemistry and biology has discussed every corner but is a burning issue which supposed to be addressed immediately as possible. The chapter also indicated the problem statement, general and specific objectives of the study, research questions, significant of the study, limitations of the study, delimitation of the study and organization of the dissertation.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter concerns with reviewed literatures pertaining policy shift relatively to academic performance of secondary school girl students in science subjects. The chapter comprises of theoretical framework, empirical framework and conceptual framework.

2.2 Theoretical Framework

The theoretical framework treated some concepts, policy statements and theories. The theoretical framework aims at establishing concepts which was then developed into variables useful for the study.

2.3 Definition of Key Words in the Study

The key concepts in the study are policy, policy shift, school performances, science subjects and secondary schools.

2.3.1 Policy shift

The idea of policy shift refers to any changes related to policy programme or course of action derived from the government statement in this case on education matters. The word policy shift is defined differently by different scholars. In the words of Lester and Stewart (1996) policy shift means a replacement of one or more existing policies with one or more other polices.

The education sector has undergone with a number of policy shifts starting from the independence era, the period of socialism, the time of structural adjustments, the liberalization of economy until now. With special effect this study regards government education programmes which were run concurrently to the Education and Training policy of 1995 as a among the policy change programmes intended to impact on education delivery quantitatively and qualitatively. In this study the referred policy changes are the SEDP, BRNEd and FFE. The word innovation refers to establishment of something new or an emergence of novelty due to discovery or

creativity of people or the enchantment of new knowledge of the same thing. Knox (2002) conceived the word innovation in the economic perspectives as a way of adding value or the novelty of the organization, suppliers and customers, a process of inventing new procedures, solutions, products and services in marketing. In policy discourse therefore the concept policy innovation implies change of or introduction of new statements, courses of actions, new political will and strategies to which the policy makers invent to facilitate the attainment of the goals or objectives already established (Anderson, 2009). In this study, innovation refers to the specific areas and strategies pointed out by the policies such as SEDP I and II, BRNEd and FFE with the intention of improving and enhancing education quality for science subject in secondary schools of Tanzania.

2.3.2 Academic performance

Performance is the level to which the objectives or goals are achieved by a group or individual. According to Boa (2014) in the context of education the academic performance is a product of the input-process-output. In other word academic performance is an outcome of the interaction between pupils, teachers, facilities in one hand, school environment, management, curriculum implementation, and policy intervention on the other hand to produce a good number of student who pass in their final examinations, capable of face the daily challenges and willing to contribute for the development of the society and the entire nation (Kivenule, 2015). It is very hard to measure academic performance by limiting the outcome to just a single effect that is examination pass rates. Science subjects according to the curriculum of Tanzania encompasses all subjects of pertaining to natural sciences like physics, Chemistry and Biology but not limited to it, the curriculum also consider agriculture, home economics and information and technology (ICT) as part of the science subjects (URT, 2010). In this study, the concerned science subjects were biology, physics and chemistry.

2. 4 A Review of Policy Interventions in Education

This section reviewed some of the policy statement relevant for the study. The main documents under review are SEDP (2011- 2014), BRNEd Education and Education and Training Policy 2014. The intention is to find out the concern of each of these policy documents on addressing the issue of performance of pupils particularly secondary school girls in science subjects.

2.4.1 Secondary Education Development Programme phase Two (SEDP II)

This document was put into effect in 2011 and it was sought to address the shortcomings of SEDP I. The programme operated for five years from 2011 to 2014. The SEPD operation is founded under the need to achieve three specific objectives (i) to increase the proportion of their relative age group completing secondary education, especially underserved groups, (ii) To improve learning outcomes of secondary pupils especially at lower level (iii) To enable the public that is the private and local sectors to manage secondary education effectively.

In order to sustain such success and address post SEDP 1 challenges, the Government of Tanzania prepared a 5 years (2010 - 2014) program, the Secondary Education Development Program (SEDP II) that built on the outcomes, institutional structures, and lessons learned from SEDP I. The SEDP intended to increase the proportion of the relative age group completing secondary education, especially under-served groups including girls; to improve learning out comings of secondary students especially at a lower level and to enable the public, including local authorities and private sectors to manage secondary education effectively.

The achievement of these objectives went similar to the strategies for implementation. It involved the need to upgrade the standard of the existing schools. Ensure equitable provision of qualified teachers with the main focus on increase of teacher for science subject, mathematics and English language. Finally, the other strategy was to provide sufficient capitation grants to secondary schools and oversee of its utilization, training for capacity building and technical assistance. In other words, the three strategies sought to revamp the standards of schools in terms of infrastructures, teacher supply and retention. The second strategy strives at

improving the number of science, mathematics and English language teacher but also improve the quality of their profession through in service and professional trainings. The last strategy is basically directed towards strengthening ways of financing secondary education in public schools, improve school management capacity.

2.4.2 The Big Result Now project in Education (BRNEd)

There are a lot to could be said concerning the emergence of BRNEd programme in Tanzania. It suffices to limit the information in to the context of education. BRNEd programme was made to intergrate education sector with the intention to enhance education quality in Tanzania for primary and secondary education levels. It encompassed a number of mechanisms or decisions which accompanied its implementation in education. The concern for academic performance of students in national Examinations was primarily dealt by reviewing the pass mark grading in Primary School Leaving Examination (PSLE) and Certificate of Secondary Education Examination (CSEE). The follow up was made to see outcomes are attained within the short time (Jessie & Asim, 2014).

2.4.3 Education and Training Policy 2014

In 2014 the government of Tanzania issued a new version of Education and Training Policy. The policy has seven specific objectives that were intended to be implemented. This study however will make reference of two policy objectives stated in the policy document. The second objective aims at establishing quality education and training that could be recognized nationally, regionally and internationally and the sixth objective aims at ensuring a continuous system of financing education and training in the country. The second objective is expressed by the following policy statements:

> *The government will make sure that learning and teaching facilities, equipment and materials needed for Education and training sections are provided for improving the sector for science and technology. Together with that, the government will make assure the presence of a single text book for each subject for each pupil in primary education. The sixth objective was supported with the statement which expresses the intention*

of the government to establish free education programme. The government circular NO.5 defines free education to mean pupils or students will not pay any fee or other contributions that was being provided by parents or guardians before the release of new circular(URT,2014).

The Right to Education Initiative (2016) asserted that with the introduction of free education children in Tanzania will profit from eleven years of free schooling. The establishment of the free education responds to Goal number 4 of the Sustainable Development Goal that encourages states to assure every child completes free, equitable and quality primary as well as secondary education. While it is more evident that free education will revamp enrollment rates in both primary and secondary schools just as per experience of 2002 in primary school, the strategy to eliminate fees is nonetheless promising the need to increase quality of education. The policy is very silent on how to integrate quality education delivery parallel to enrollment rates which are expected to increase.

In Tanzania Policy programmes in Education sector has been undergo changing time to time aim to provide quality education for girls through Government support them to put more preference in studying science subjects hoping that girls' enrollment will increase in science and improve the performance contrary to government expectation, performance of girls in science subjects continue declining. The greater emphasis of this study is to familiarize with the performance for secondary school girls in science subjects (CSEE: URT, 2014).

2.5 Political System Theory

Policy programmes are seen as political instruments used to affect the demands of the environment or a given set of systematical political activities. The government institutions make authoritative arrangement of values or decisions to bind the community together. The political system theory contends that policy performance involves system of inputs- outputs activities which the government has to establish and implement (Anderson, 2003).

The Input involves demands and support. The output in political system includes laws, rules, judicial decisions and other related declarations which save to make the programme legitimate and ready to undertaken by political leaders or other authorities engaged in implementation process. The out puts are expected to alter the environment and the demands deriving from the programme or policy shift. Anderson stressed that the usefulness of political system theory is to limit policy to a certain context and goals. It also explains that the government is acting in favour or by responding to the needs made upon it.

In this study the political system theory will be used to elaborate relationships of policy shift with the performance of science subjects for student girls in secondary school. The policy or programme supports are stating the inputs and the process outcome comprises the outputs. A system comprises of different part which tend to interact and affect each other in a given environment (Littlejohn, 2001). Policy programmes in education sector also affect the curriculum developers, education officers, as well as the interaction between teachers and student in classroom. In political perspective the policy is an instrument tends to push different sectors and levels of the government to work coherently to bring intended outputs.

Also, policy being an instrument focuses on politics within a policy, there different innovation that seen in education sector this can lead positive changes in education and creates good performance of the student due to decision made by political leaders can help to improve education system in Tanzania. Political leaders established policy SEDP, BRNEd and FFE in education sector at different time with various objectives and strategies mainly to improve and provide the quality education to majority of Tanzania.

Innovations within a policies are not enough to address the problem of declining performance of student girls in science subjects but there should be other factors that if could be insisted in such a way that will help to bring good performance these include; well-equipped laboratory, availability of qualified science teachers depend on student ratio, motivation and encouragement to student girls, preference of student in studying science subjects, good learning environment and qualified

competent teachers in science. Kivenule (2015) posited that such interactions initiated by the change in policy programme may alter changes in school function hence subject performance as well.

Accordingly, the inputs in secondary schools' system include qualified students, improved curriculum delivery, improved techniques of management and planning, effective teachers' development strategies, developed infrastructure and physical structures and provision of facilities for secondary school services. On the other hand, output include education customers' satisfaction particularly production of students with at least 5 credit passes, increased emphasis on students' discipline, qualitative future leaders and social movers. Basing on the system theory by Draft (2008) and the adopted model by Abari and Odunayo (2012), the input of this study will include areas addressed by SEDPII, BRNEd and FFE as well as the outputs will include the students' academic performance in CSEE in specific subjects.

2.6 Empirical Literature Review

This section presents a discussion on the research topic from studies done by different researchers in various contexts. The empirical literature review was drawn from research journals, articles, published and unpublished Masters and PhD dissertations, magazines and books as well. The rationale of this section is that, it enables the researcher to establish the research gap.

Programme of International Students Assessment (2007) conduct Comparative International survey on Science Education in Europe: National Policy Practice and Sciences Research in England. This study was used exploratory research design, Questionnaires using pilot survey and documentary review. The study sample constituted 50 students from different countries in Europe like Slovenia, United Kingdom (Scotland) (UK), French, Spain and German were attained. The target of survey is to encourage students to have strong desire in involving in science. Experience from the findings showed that student girls perform well in science subjects compare to student boys the reason behind was that of language problem. PISA asserts that there is serious problem of skills used to deliver knowledge to the learners studying science. To overcome the problem, government builds special

schools for boys and girls (single sex schooling). Government established the programme like, Gender Social Class Evaluation (GSCE) allows teachers, students and other educational stakeholders to interact with one another to share ideas and experiences concern science subjects (Elwood, 2005).

Kalagbor (2016) conducted the comparative study on "An analysis of factors influencing student's academic performance in public and private secondary school" a case of River State in Nigeria. The study was applied descriptive research design. The study employ primary and secondary source of data collection. In primary source the used interview and questionnaire but in secondary source the study applied documentary review to obtain information about the study. The study employed a sample size of 498 respondents who were used to give information about the study in respected areas. The study findings revealed some factors which contribute to academic performance of students in both private and public secondary schools. Those factors included; availability of school facilities, friendly relationship between teachers and students, enough salary to teachers, management of students group ratio, effective utilization of lesson period, adequate qualified teachers all of these factors if addressed in good way could enhance positively academic performance to secondary school students. Further, observation from discussion show that poor teaching and learning facilities lead to the declining of student's performance in both public and private secondary schools. Also the provision of quality education associated with the presence of quality infrastructures. In this study show private secondary schools there was quality infrastructures based on learning and teaching, strong relationship between teachers and students that is active involvement of students in learning using learner centered method therefore, students became active in learning than that of public secondary schools.

Awuor (2013) conducted qualitative study on "Factors influencing girl's performance in mathematics and science subjects in Kenya Certificate of Secondary Education in public secondary school". The study was done in West land district in Nairobi Kenya as the case study. The study employed descriptive research design based on cross sectional descriptive research design. This study was mainly

questionnaires, focus group discussion and documentary analysis as among of methods of data collection. A sample size 1526 informants were attained.

The results from findings show that student boys perform well in science than student girls for instance Kenya certificate secondary education in 2011 a number of girls who taking biology subject were only 74.7% out of 93.13% of students taking biology score C. chemistry subject in Kenya, boys done much better than girls example at Livingstone Mixed High school only 4 student boys score C and above but no student girls managed to score similar average score marks. This study further observed different challenges facing girls in performing poorly in science subject these include poor learning environment, poor proper preparation before examination, incompletion of syllabus, biased instructional methods, student girls disinterest toward studying science and shortage of qualified teachers, inadequate teaching and learning science resources.

This study the researcher shows a number of factors influencing performance of girls in science but failed to include policy in relation to performance of girls in science also the study has shown that there is existence gap between male and female students on performance in science subjects.

A comparative study was conducted by Kivenule (2015) to examine the causes of school performance differences between public and private secondary schools in Kinondoni Municipal council in Tanzania. A case study design was employed, while questionnaires, observation, interview and documentary review were data collection tools. The study results demonstrated that performance of private secondary schools was better compared to that of public secondary schools. The reasons for this performance gap included: presence of high competent teachers, good salary pay for the teachers, presence of enough learning and teaching resources, good set of school management control system and quality of students enrolled in private secondary schools contrary to the public ones. All these aspects were mentioned in favor of private school as compared to public secondary schools. The findings posit an existence of gap in quality between the private and public schools in secondary education delivery.

A study on assessing performance was done in Njombe District Council (Lugenge, 2015). The study assessed the effectiveness of BRNEd in education specifically primary school national examination performance. The study adopted a survey design and interview and question were data collection tools. The study constituted a sample size of 122 respondents. The study results showed that BRNEd policy did not achieve the targeted outcomes. The performance of primary school candidates in Njombe District Council remained poor and even below the national strategic goals. Although, teacher and other education officials worked hard, there was insufficient flow of inputs before and even during the BRNEd implementation phase, hence no greater changes on the side of school performance in primary education.

Wandela (2014) conducted a qualitative research on Tanzania Post-colonial educational system and perspectives on secondary science education pedagogy and curriculum. The study was motive by the fact that there is a global trend of the nation moving towards the development of science and technology but in practice the observations demonstrate a presence of poor performance of students in science subjects, decreasing number of students attracted to take science subject in higher learning and the lack of science research in secondary and tertiary education.

The use of ethnographic design assisted the researcher to develop two methods of data collection: Interview and observations. The study found the perceptions of people on science subject to be diverse. The Ministry of Education and vocation Training by then used results of final national examinations to indicate the level of performance. In addition, the study further observed low investment strategies on science subject as among the bottleneck for students' performance and low motivations to study science subjects in secondary schools.

Makoye (2014) assessed the Academic performance of students under secondary Education Development Plan (SEDP I) Implementation in Nyamagana district in Tanzania. Using a Cross sectional design, the researcher collected data through interviews, field observations and documentary reviews. The study approach was qualitative thus purposive sampling technique was employed to attain total of 100 respondents as a sample size. It was found that the level of academic performance

before and after SEDP I had no significance difference. It was as if everything in terms of quality of teaching and learning remained constant while the number of students increased. However, the findings on the determinants for academic performance were presence of qualified teachers, the nature of learning and teaching environment, presence of adequate classrooms, text books, laboratory and library equipment or facilities. Other issue was the consistence and adequacy of education funding system.

2.7 The Research Gap in Literature

The studies conducted by Kivenule, 2015; Lugenge, 2015; Kalagbor (2016); Wandela, 2014 and Makoye 2014; Awuor (2013) have dealt with the problem of performance in secondary and primary schools. While each of the researchers used different research design they both agree on the fact that there is a problem of poor performance in different subjects among students in primary and secondary education systems. All of the researchers used mainly a qualitative approach to address performance of students and come up with some new finding on what determines performance in our education systems. These findings are worthy praise as they uncover causes of the problem.

Awuor (2013) focused on gender perspective in education especially girls' performance in mathematics and science but in this study entail on science subjects only and the study never consider contribution of policy shift SEDP, BRNEd, FFE and performance of student girls in science subjects. In relation to the prospective study there are two researchers who have established the relation between policy programme and performance of students.

Makoye (2014) focused on SEDP I and (Lugenge, 2015) on BRNEd respectively. The findings from two studies point a failure of the policy programme to impact on performance of students in primary and secondary education. In spite of the fact that these related findings, the studies have not treated academic performance from the perspective of gender categories of male and female. Moreover, all the reviewed studies have not based itself in science subjects for secondary education. It is from this juncture that the prospect researcher finds necessity to conduct a study

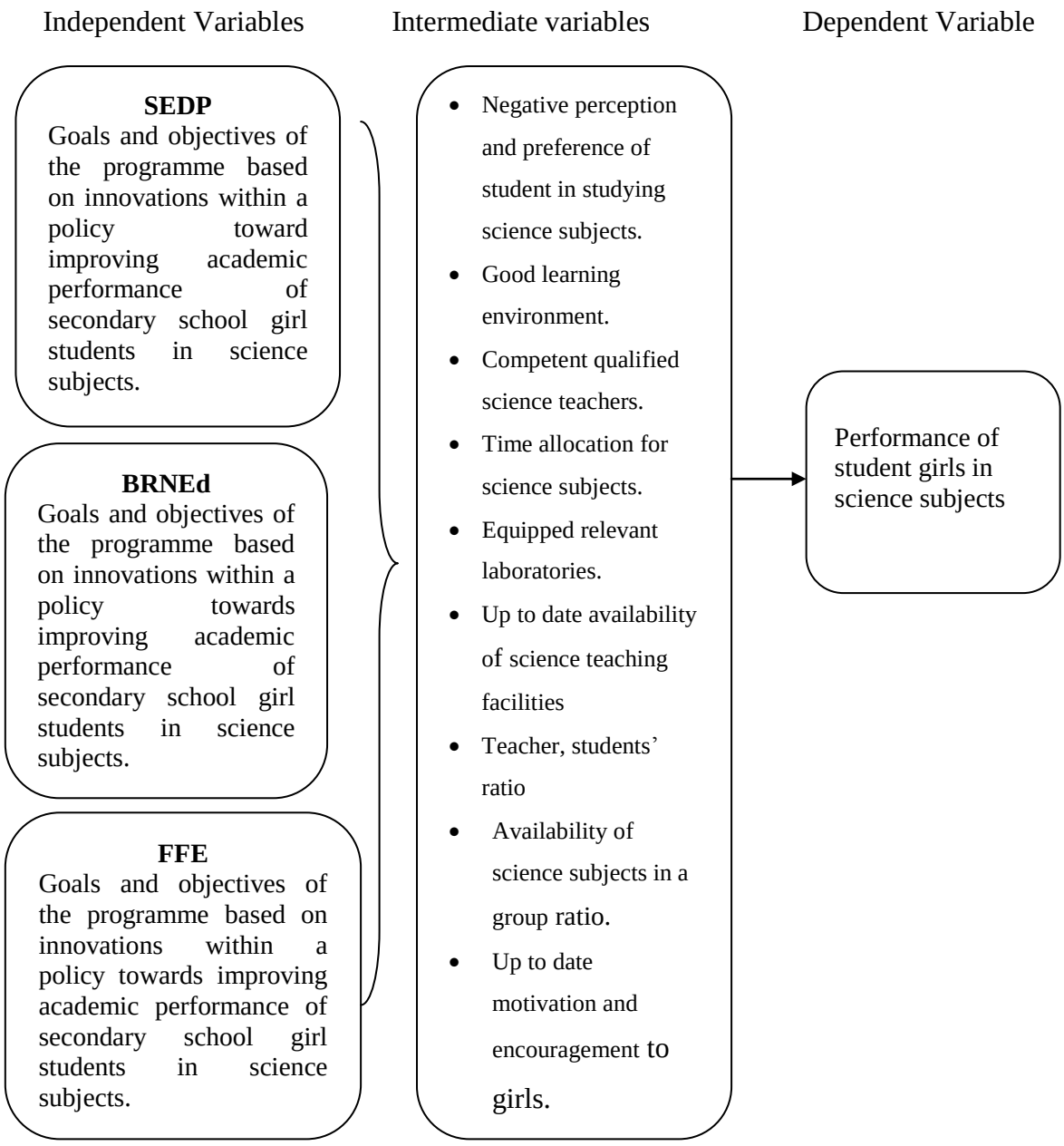
establishing the gender perspective in education performance under the policy shifts of SEDP II, BRNEd and FFE.

2.8 Conceptual Framework

The theoretical and empirical review underpinned the conceptual design of this study. The independent variable is policy shift which is indicated by the SEDP II, BRNEd and FFE. The measurement indicators of this independent variable include addressed innovations by the given policies such as improved school environment, Laboratories buildings, Supply of Apparatus/Equipment, presence of qualified science Teachers, Sufficient teaching and learning Materials and the intelligible curriculum for science subjects.

On the other hand, the dependent variable is academic performance of secondary school girls in science subjects. The performance in school is evaluated in terms of good examination results in science subjects of student girls. The conceptual connection entails that, the areas (innovations) addressed by the SEDP, BRNEd and FFE include Negative perception of student in science subjects, good learning environment, competent teachers, well equipped laboratories, availability of science subjects in a group ratio, motivation and encouragement to girls, curriculum for science subjects are expected to influence positively performance of girls' science subjects.

Figure 2.1: Conceptual Framework



Source: Researcher Own Construct, 2018

2.8 Summary of Chapter Two

The chapter presented and discussed the literature review pertaining to policy shift relatively to academic performance of secondary school girl students in science subjects. It consisted an introductory section, theoretical framework, definition of the key words of the study, review of the policy in education which including Secondary Education Development Programme phase II (SEDP), Big Result Now in Education (BRNEd) and Education and Training policy of 2014 , policy statements, theory of the study, empirical literature and conceptual framework. This chapter therefore, plays a vital role for the researcher to review on the previous written documents included published and unpublished documents and find out what are missing in the body of knowledge and come with new aspect to add.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is a way to systematically solve the research problem and can also be understood as a science of studying how research is done scientifically (Kothari, 2004). Research methodology is made up of the research approach, research design, area of the study, population of the study, sampling techniques and sample size, method of data collection, data analysis, reliability and validity and ethical considerations. The components of the research methodology are presented and discussed hereunder.

3.2 Research Approach

The study was made of mixed approach to study the relationship between phenomena under investigation. The mixed approach describes the orientation of the study in terms of data to be collected and methods to be used for data collection and analysis. In fact, much data was qualitative with some extent of numerical data expressing the rate of performance of girl's students in secondary science subjects. Creswell (2003) defined mixed method as an approach whereby the researcher bases the knowledge claims on empirical grounds to explain about the problem-centered perspective by employing multiple strategies of data collection. The mixed method in this study takes the form of concurrency where data from quantitative data was handmaid of the qualitative information. The mixed method is associated with the need to transform the trend or the practice and advocate for the new orientation such as search for empowerment of the marginalized groups like children, women, and ethnic minorities who can hardly defend themselves (Mertens, 2003).

3.3 Research Design

The study used the case study design to explore more thoroughly the perceptions and convictions of people pertaining to policy contributions on academic performance of secondary girl students in science subjects. A case study design is very flexible in accommodating different methods for data collection. According to Gillham (2000)

a case study design serves to investigate the in-depth understanding of a phenomenon by collecting evidences from the abstracted and collated to get the best possible answers.

3.4 Area of the Study

The study was conducted in Ileje District. Ileje district is among the areas that profited from the intervention of the SEDP, BRNEd and the FFE 2014 for secondary education. The study was conducted from four secondary schools found under the legislative zones of the district. These were Itumba in Itumba ward, Ibaba in Lubanda ward, Lubanda in Lubanda ward and Nakalulu in Isongole ward found in the district. Administratively, the Ileje district was found in Songwe Region and it has two divisions. The Bundali division and Bulambya divisions composes **18** wards. Geographically the district was demarcated by the Mbeya Urban and Rungwe in the North while the Southern side the district is bordering Malawi and Zambia. Kyela district was in the East and the western side boarded by Mbozi district. The estimate surface area of the district was 1,908 squares of kilometers. The population was estimated to be 124,451 people as per the National population Census of 2012 (URT, 2013). This study has been done specifically in Ileje district council due to the reason that the performance trend show that the district not never found into top ten in Tanzania and limited literature review in which have been done by other previous researchers focusing on the same topic under this study.

Map of Ileje District Council

Source: Ileje District Council Report (2014)

3.5 Population of the Study

Sounders *el al* (2000) defined population as the total number of people in which sample size was taken to participate in a particular study so that to help the researcher to acquire information or facts from studying phenomenon. In this study data were collected from four community secondary schools including Ibaba, Itumba, Lubanda and Nakalulu in Ileje district council found in Songwe Region. The study participants targeted in this study include District school Inspectorate, District Secondary Education Officer (DSEO), Head of schools, Academic teachers, Normal science teachers, Parents and Girl students studying science subjects such physics, chemistry and biology.

District school Inspectorates were involved purposively in this study as one of study participants because were the one who administered and organized as well as handle all education matters at secondary schools. District Secondary Education Officer (DSEO) was also selected for purposively due to the fact that act as director who managed to dealt with education issue in respective district in addition to he has actual information regarding contribution of SEDP, BRNEd and Fee Free Education in academic performance of secondary school girl students in science subjects such as physics, chemistry and biology.

Head of school also selected for the reason that they were the managers who wish to oversee all education matters in the school. Academic teachers were involved to participate in this study because of their position hold at school also the researcher estimated to attained relevant information regarding the performance of girl students in science subjects even they had details about the number of girl students studying science for instance performance results in mentioned subjects.

Normal science teachers were incorporated in the study because were the one who implement the policy interventions like SEDP, BRNEd and Free Fee Education through in teaching activities also science teachers know well the nature of girl students studying science subjects and had appropriate information like records of performance of particular science subject. Science teachers were the one who know well some of confront that faced them during the implementation of three mentioned policy interventions hence proof failure to match with its intended goals.

Girl students studying science subject such physics, chemistry and biology were selected from four community secondary schools such as Ibaba, Itumba, Nakalulu and Lubanda for the reason that were the one who taking science subjects and receive an opinion as well as comments from science teachers and add more effort study hard in those topic seemed to difficult to understand.

Also, the parents in respective community involved in this study because were the one who stayed nearly with their kids especially girls hand they take care to their children, pay them school fee, buying school uniform so their expectation is to see their children performing well therefore, researcher wanted hear their views about

contribution of Free Fee Education in academic performance of girl students in science subjects due to the fact that mentioned policy intervention parents were the one who affected direct in positive way.

3.6 Sampling Technique and Sample size

The study used probability and non-probability sampling techniques. The probability sampling was simple random sampling technique mainly used to select students to participate in the study. The purposive sampling was used to select schools and other respondents for the sake of attaining data from representative sample of population holding viable information about the study. According to Yin (2011) the purposive sampling technique involves selection of participants or sources of data to use in the study basing on either the richness or relevance of information the research participants possess. With purposive sampling technique the study selected district education officer, secondary headmasters/mistresses, Academic teachers and experienced secondary science teachers.

3.6.1 Sample size

The total number of study participants representing the rest of the population in the study is what we refer as a sample size (Cresswell, 2014). The sample size under purposive sampling technique can be designed prior to the study by calculating the number of respondents from each units of analysis. In this study the estimates sample size was 87 study participants. This sample was attained by selecting participants from 4 secondary schools apart from the District Education Officer and School Inspectorates Officers. Sample size in this study include two (2) district school inspectorates, one (1) District Secondary Education Officer (DSEO) four (4) head of schools, eight (8) academic teachers, sixteen (16) science teachers, sixteen (16) parents in respective community, fourty (40) secondary school girl students studying science subjects. The table 3.1 describes the distribution of the sample of study participants.

Table 3.1 Sample Composition

S/N	Units of Inquiry	No. of respondents	Sample size
1.	District Education Officer	1	1
2	District Inspectors Officer	2	2
3	Headmasters/ mistresses	1	4
4	Academic teachers	2	8
5	Science teachers	4	16
6	Secondary school Students	10	40
7	Parents in respective community	4	16
TOTAL		**24**	**87**

3.7 Source and Methods of Data Collection

The primary type of data was collected by using interviews and focus group discussion from key participants in the research conduct. Documentary reviews in turn were used to gather secondary data. Methods used to collect primary data are useful in evoking the in-deep understanding of opinions and perceptions of people pertaining to the study. Whereas, the documentary review method helped to validate primary data under comparative perspectives.

3.7.1 Types of data

Until the completion of the study there was a collection of both primary and secondary data. The primary data refers to the firsthand information gathered directly from the field or from the research area. Meanwhile, secondary type of data comprises of the information collected from already documented or preserved sources like books, newspapers, journals and other documentaries (Best & Khan, 2006). Each of the type of data to be collected was associated with certain methods put in place for facilitating its collection process.

3.7.2 The interview method guide

The interview method was referred to a verbal conversation between an interviewer and interviewee whereby the interviewer poses questions which are expected to be answered by the interviewee verbally. (Button,1998). The study made use of semi-structured interview to four heads of secondary schools and the Academic teachers in selected secondary school such as Ibaba, Lubanda, Itumba and Nakalulu. The semi-structured interview permits study participants to give more detailed account of his or her understanding about the issue under the study, meanwhile allowing the researcher to have room for some additional or probing questions to push the respondent provide more information (Long, 2007).

3.7.3 Focus group discussion guide

The focus group discussion method (FGD) was qualitative method of data collection in a group of people whose individually are either heterogeneous or homogeneous but there should be a common interest shared among the individuals forming a group (Jupp, 2006). A focus group discussion tends to involve four to ten participants who could be facilitated by a moderator. In this study, science teachers and students from each school were included to form two groups for science teachers and girl students studying science ready for the discussion in different time group.

3.7.4 The questionnaire method

The study also used to collect primary data from some girl students taking science subjects from form three and four. Student provided an input response to see how they react to changes in policy programmes and how are they personally affected by such changes in this study was mainly open ended questions need was to facilitate easy responses for study participants. Also district school Inspectorates were given questionnaires questions so that to hear their view how they perceive contribution of policy interventions such as SEDP, BRNEd, and Fee Free Education in academic performance of girl students in science subjects. By definition questionnaire involved a set of designed questions given in exactly the same form to a group of participants for the sake of collecting research data about an issue of interest (Jupp, 2006). The questionnaire sheet was developed and the provided to the intended participants in the study.

3.7.5 Documentary review

In real sense the researcher cannot obtained clear facts through depending on one written source of information to accomplish the work of conducting research (Yin, 1994). Therefore, the researcher might keep in mind to use a variety written resources to extract information that made the study to acceptable and attract a reader to get message. Ndunguru (2007) contend that documentary review entails the process of gathering information from various written resources that give appropriate facts or information to the study phenomena. Examples of written documents used in this study were policy intervention reports SEDP, BRNEd, NECTA results document, the reason was to see different views related to the contribution policy interventions in academic performance of girl students in science. The researcher used published and unpublished dissertation for the purpose of understanding what is missing in the body of knowledge and to find other thing to add on that and books and journal were used to give appropriate information in academic performance of girl students in science subject such as physics, chemistry and biology.

It also involves a data collection method derived from the already written materials or documents (Best and Khan, 2006). These documents range from public, through private to personal sources. The secondary data to be collected were those which are recorded reports, published papers and policy frameworks related to education policy programmes of SEDP, BRNEd and FFE.

Thus, information which acquired from written materials as source of information is more valuable to both methods of data collection such as focus group discussion guide and interview guide.

3.8 Data Analysis

Is a systematic search for meaning from the transcribed texts by organizing and interrogating data in ways that permits to the researcher to find patterns, identify themes, discover relationships, and develop explanations and interpretation for the end of generating inductive conclusions or grounded theory (Hatch, 2002). The collected data was transcribed, organized, coded into categories and make further content analysis of the meaning of concepts or cases presented from the raw data.

Kothari (2008) pointed out that all facts extracted by the researcher from the field study first were supposed to be analysed depended on its specific content. For instance, in this study the researcher used questionnaire, interview guide and focus group discussion guide questions. Therefore, all related themes extracted from the study might put them together on looking those relevant and leave all irrelevant one and draw conclusion.

The study used both qualitative and qualitative research approaches. In qualitative approach there is descriptive research design that aimed in describing a case. The facts obtained from the field extracted by using focus group discussion guide and interview guide questions and the finding results were analysed on focused to specific content analysis and proved by the researchers. In other side quantitative approach, the facts were collected by using questionnaires as one of the methods used in data collection. In this method the facts were classified into graphs, tables, pie chart, numbers, frequency and percentage depended on the total number of study participants as well as the three specific objectives of the study. The Statistical Package for Software System (SPSS) supported all procedures to be accomplished.

3.9 Reliability and Validity of Data

Ndunguru (2007) asserts that the term reliability refers to a situation in which the investigators are able to obtained similar outcome immediately at the time utilize the similar device or instrument used to measure the reliability of the facts gathered. The facts which are reliable always focused on truth and facts accept changes at any time. In this study the researcher ensure reliability by using pre- testing device. Validity is a situation in which special device employ in the field study to explore the exact one. Thus, to ensure validity in this study, the issue of communicating the research maintained suitability way of communicating to each other. Themes gathered by using vernacular language the device utilized to make fact valid was to ask for translator in Kiswahili language.

3.9 Ethical Considerations

Thomas (2009) asserted that ethics is a doctrine of behavior that regarding what is correct and not correct one. One of responsibility of researcher during data collection was to appreciate the study participants and also the investigator secured the study participants confidentiality that information provided was mainly useful for research purpose. This study adhered to all ethical obligations required in conducting research.

Some major considerations were intellectual property, search for research permit from authorized institutions, seek for the consent of the participants and assure the security of respondents by practicing anonymity. No manipulation of data or respondents was permitted during the entire process of field research.

Furthermore, researcher applied for permission to conduct the study from Mzumbe University and permission from District Administrative Secretary (DAS) in Ileje district council. The research also need to use polite language to ask questions and allow them to participate in giving their views about studying phenomenon during interview session rather intervene the point. The work of conducting research is un easier thing that the researcher might guarantee the research principles simply because in qualitative research approach the researcher extracts more information from study participants so that to understand their views concern a study phenomenon (Platton, 2002).

3.10 Summary of Chapter Three

The chapter is comprised of an introductory part, research approach, research design, area of the study, population of the study, sampling techniques and sample size in this study were 87 participants who were attained by selecting from 4 secondary schools apart from the District Education Officer and School Inspectorates Officers. Sample size in this study including two (2) district school inspectorates, one (1) District Secondary Education Officer (DSEO) four (4) head of schools, eight (8) academic teachers, sixteen (16) science teachers, sixteen (16) parents in respective community, fourty (40) secondary school girl students studying science subjects, method of data collection (semi – structured interview guide, focus group discussion

guide, questionnaire and documentary review), data analysis the researcher employ both qualitative and quantitative in qualitative content analysis was used to analyse important content basing on perceptions, views of study participants and quantitative data used descriptive form to analyse statistics data, frequencies, tables, reliability and validity and ethics consideration.

CHAPTER FOUR

PRESENTATION OF FINDINGS

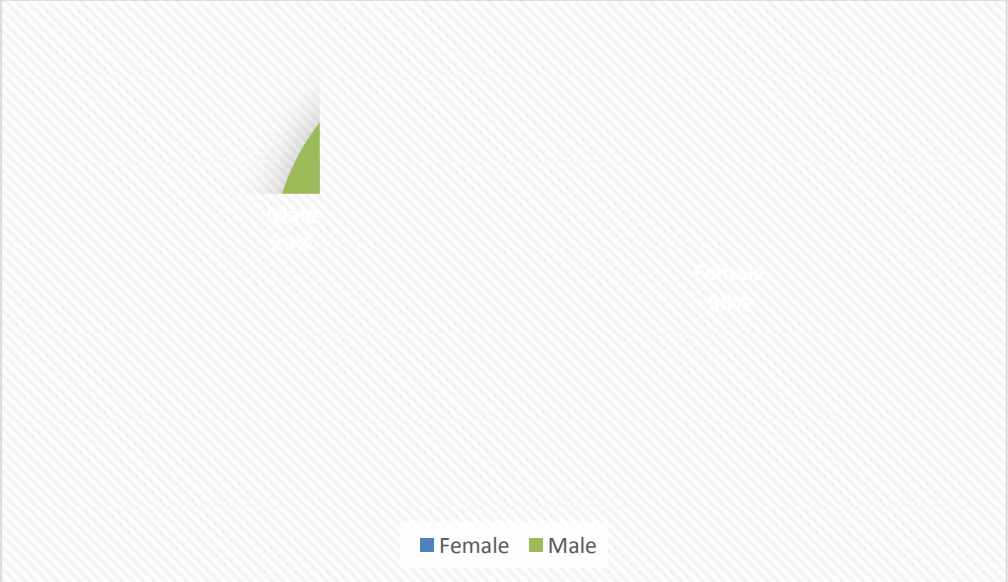
4.1 Introduction

This chapter presents the study findings. The chapter starts with an introduction, presentation of respondents' demographic information and study findings on the research objectives which were: to identify the contribution of SEDP in academic performance of secondary school girl students in science subjects in 2011 to 2015, to determine the contribution of BRNEd in academic performance of secondary school girl students in science subjects from 2013 to 2015, to find out the contribution of Fee Free Education Policy on academic performance of secondary school girl students in science subjects from 2016 to 2017. Before data presentation on the research objectives, demographic characteristics of the study participants basing on sex, age and education level was presented.

4.2 The Participants by Sex

Research participants were basing on their sex. The reason for presentation of research participants by their sex is the desire of the researcher to establish a balanced source of data from including both sex (Male and Female). Although it was the researchers' intention to have equal numbers of participants to be involved in this study, it was difficult to get equal numbers of male and female due to differences in willingness between male and female participants to participate in responding the research questions during data collection process. In this study, female participants dominated the study informant side who were 58 (66.7%) and male participants were 29 (33.3%). Despite the gap on number of men and women participants, adequate data to suit the study objectives were collected. Figure 4.1 below presents a summary basing on participants by their sex.

Figure 4.1 Study Participants According to Sex



4.3 Study Participants by Age

Study participants based on Age, this was done due to the researchers' desire to define the age groups who contributed their views in the study. The varied age groups of research participants enabled the collection of research data from varied perspectives. The study findings show that 18 (20.7%) participants had the age below 18 years, 22 (25.3%) participants had the age ranged between 18 to 24 years, 37 (42.5%) participants had the age between 25 to 45 years, and 10 (11.5%) had the age of 45 and above. From the presented data, many participants had the age ranged between 25 to 45 years. This is a justification that more matured people who were assumed to have critical minds played a big role on providing information to suit the study. A summary of participants by their age is presented in Table 4.1 below.

Table 4.1 Study Participants by Age

Variable		Frequency	Percentage (%)
Age	Below 18 years	18	20.7
	18-24 years	22	25.3
	25-45 years	37	42.5
	45 years and above	10	11.5
	Total	**87**	**100**

Source: field Data, 2018.

4.4 The Study Participants According to Education level

The study participants were categorised basing on education level this was done so as to establish trust on the data collected where by the participants were having varied school qualifications which determined their level of understanding on the research topic. The study accommodated information from varied perspectives resulted from varied education level of participants so to speak. From the study participants, 16 (18.3%) were primary school leavers, 40 (46%) had Certificate of Secondary Education Examination (CSEE), 9 (10.3%) were diploma holders, 19 (22%) were bachelor degree holders, and 3 (3.4%) were Master's degree holders. From the presented data of participants on education level, it is revealed that many participants had secondary education level. Figure 4.3 below present a summary of participants' level of education.

Table 4.2 Study Participants by Education level

Variable		Frequency	Percentage (%)
Education level	Primary School Leavers	16	18.3
	Certificate of Secondary Education Examination (CSEE)	40	46
	Diploma holders	9	10.3
	Bachelor degree holder	19	22
	Master's degree holder	3	3.4
	Total	**87**	**100**

Source: Field data, 2018.

4.5 Contribution of SEDP in academic performance of secondary school girl students in science subjects.

This specific objective intended to identify the contribution of SEDP in academic performance of secondary school girl students in science subjects including physics, chemistry and biology in Ileje District Council between 2011 and 2015. Under this objective, interview guides, Questionnaires and documentary reviews were used to collect data about performance of girl students in science subjects. The researcher

first, wants to know about the trend of performance of secondary school girl students in four (4) selected secondary schools in Ileje District Council.

4.5.1 Performance of girl students in physics subject from 2011 – 2015

The study findings showed that performance of girl students in secondary schools especially in science subjects including physics was poor. The study findings revealed that in 2011 among 28 candidates who sat for form four nation examinations only 2 (7.1%) girl students got grade 'D' in physics subject while 26 (92.9%) scored 'F' and none of them got 'A' or 'B'. In 2012 among 42 girl students, 1 (2.4%) scored 'C', 8 (19.0%) scored 'D' and 33 (78.6%) scored 'F'. In 2013 out of 33 girl students 3 (9%) scored 'C', 13 (39%) scored 'D', 17 (52%) scored 'F'. The trend goes alike in 2014 whereas 3 (10%) girl students scored 'D' and the remaining 27 (90%) scored 'F'. In 2015, out of 19 girl students who sat for form four national examinations, 2 (11%) scored 'C', 5 (26%) scored 'D', the rest 12 (63%) scored F. This summarized and presented Table 4.4 below.

Table: 4.3. Performance of girl students in Physics from 2011 - 2015

PERFORMANCE IN PHYSICS							
GRADE	YEARS					TOTAL	%
	2011	2012	2013	2014	2015		
A	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0
C	0	1	3	0	2	6	4
D	2	8	13	3	5	31	20
F	26	33	17	27	12	115	76
TOTAL	28	42	33	30	19	152	100

Source: NECTA, 2011-2015

4.5.2 Performance of girl students in chemistry from 2011 – 2015

The performance of girl students in chemistry for five years in selected secondary schools in Ileje district revealed poor performance. In 2011, 19 (30.6%) scored 'D' and 43 (69.4%) scored 'F'. in 2012 among 54 girls, 13 (24.1%) scored 'D' and the rest 41 (75.9) scored 'F'. Performance in 2013 shows that among 91 girl students

who sat for form four national examination 2 (2%) scored 'B', 4 (4%) scored 'C', 6 (7%) scored D, the rest 79 (87%) scored 'F'. In 2014, 43 girl students sat for the form four national examinations. Among them 1 (2%), 2 (5%) scored 'C', and 7 (16%) scored 'D', the rest 33 equal to 77% scored 'F'.

The general performance of girls students in Chemistry for five years indicates that among 277 girl students who sat for form four nation examination 3 (1%) scored 'B', 7 (2%) scored 'C', 53 (19%) scored 'D' the rest 217 (78%) scored 'F'. This result evidenced that high frequencies of girl students end up with scoring 'F' in science subjects as it is summarized in Table 4.5 below.

Table 4.4 Girl Students performance in chemistry from 2011 - 2015

PERFORMANCE IN CHEMISTRY							
	YEARS					TOTAL	%
GRADE	2011	2012	2013	2014	2015		
A	0	0	0	0	0	0	0
B	0	0	2	1	0	3	1
C	0	0	4	2	1	7	2
D	19	13	6	7	8	53	19
F	43	41	79	33	21	217	78
TOTAL	**62**	**54**	**91**	**43**	**30**	**277**	**100**

Source: NECTA, 2011-2015

4.5.3 Performance of girl students in biology subject from 2011 – 2015

Nevertheless, performance of girl students in Biology subject from 2011 to 2015 was analysed. In 2011, 135 girl students sat for the form four national examination. Among them 3 (2%) scored 'C', 31 (23%) scored 'D' the rest 101 (75%) scored 'F. In 2012, 36 (17%) scored 'D' and the rest 175 (83%) scored 'F'.

In 2013, 131 girl students sat for the form four national examination. Among them 3 (3%) scored B, 10 (8%) scored C, 23 (17%) scored D and 93 (72%) scored F. In 2014, 114 girl students sat for the form four national examination. Among them 3 (3%) scored B, 13 (11%) scored C, 59 (52%) scored D and 39 (34%) scored F. In

2015, 143 girl students sat for the form four national examination. Among them 4 (3%) 'C', 42 (29%) scored 'D', 97 (68%) scored F.

Generally, under SEDP implementation (2011-2015), 737 girl students sat for the form four national examination in selected four (4) secondary schools in Ileje district. The general performance shows that, among them 8 (1%) scored 'B', 30 (4%) scored 'D', 505 (69%) scored 'F'. A summary of girl students performance under SEDP implementation phase (2011-2015) in four selected secondary schools in Ileje district is presented in Table 4.6 below.

Table: 4.5 Performance of girls students in Biology subject from 2011 - 2015

GRADE	PERFROMANCE IN BIOLOGY					TOTAL	%
	YEARS						
	2011	2012	2013	2014	2015		
A	0	0	0	0	0	0	0
B	0	0	5	3	0	8	01
C	3	0	10	13	4	30	04
D	31	36	23	59	42	194	26
F	101	175	93	39	97	505	69
Total	**135**	**211**	**131**	**114**	**143**	737	**100**

Source: NECTA, 2011-2015

The study findings on girls students performance under SEDP implementation phase (2011-215) in four selected secondary schools in Ileje district including Ibaba, Itumba, Nakalulu and Lubanda shows that there is poor performance of girls students in science subjects in secondary schools. From the study findings, few girl students on science subjects scored 'B', 'C' and 'D' but majority of them scored 'F'. With reflection to SEDP and poor performance of girl students in science subjects as reported in this study, it is argued that SEDP had little contribution on raising the performance of girls students in science subjects.

4.5.4 Teachers and girl students' awareness about SEDP

Focus Group Discussion guide and Questionnaires questions were asked to both science teachers and girl students who studying science subjects in order to understand if they have knowledge regarding the term SEDP. The findings result

shows that high a number of science teachers and student girls who studied science subjects did not aware about the term. The tables below show study participants' responses concerned science teachers and student girls were not aware about SEDP.

Table 4.6 below shows the study participants' responses about awareness of the term SEDP

Responses	Number of respondents	Percentage (%)
Science teachers and girl students did not aware about SEDP	50	89
Science teachers and girl students awareness about SEDP	6	11
Total	**56**	**100**

Source: Field data, 2018

The study findings show that 50 (89%) participants comprised of Science teachers and girls students who were asked questions on SEDP, majority of them were not aware about SEDP. In this situation science teachers remained dilemma due to the fact that they implement unknown policy intervention. On the other side, 6 (11%) study participants' had little awareness about SEDP.

One Science teacher from school C during Focus Group Discussion guide session blamed the way SEDP was implemented. He argued that, *"In this District at the school level some of educational stakeholders like science teachers are not involved in sense that the government left them in a side since they do not see their contributions to ensure effectiveness of SEDP so that to accomplish its stated objectives."*

Another girl student response had this to say *"…Ah! Madaam, what this word means to me I know nothing I think today is the first day to hear this word…"*

It was started that the way used by the government, Educational Ministry of Tanzania, Curriculum Developers to implement SEDP was not well known to some of educational stakeholders like science teachers and girl students studied science subjects who were mainly to implement the programme. The circumstances imply that, SEDP was unknown term at school level in the District. This situation leads

teachers to encounter difficulties on how to implement the program in order to achieve the stated goals.

4.5.5 The extent in which SEDP contribute in academic performance of girls students in science subjects such as physics, chemistry and biology.

Semi - structured Interviews, Focus Group Discussion and Questionnaires used in collecting facts to 31 participants including academic teachers, science teachers, Head of schools, DSEO and Inspectorate officers. The findings show that majority of them reported that SEDP has a little contribution on raising performance of girl students in science subjects in Ileje district. 21 (66.7%) reported that SEDP has very little contribution on raising academic performance of girls students in science subjects while 10 (32%) reported that SEDP has no contribution on improving academic performance of girls students in science subjects. A summary of the study findings on this aspect is presented in Table 4.8 below.

Table 4.7 below table shows the respondent responses about the extent in which SEDP contribute on performance of girls students in science subjects

Responses	Number of respondents	Percentage (%)
SEDP had very little contribution on raising academic performance of girls students in science subjects	21	67.7
SEDP had no contribution on improving academic performance of girls students in science subjects	10	32.0
Total	**31**	**100**

Source: Field data, 2018.

One participant in interview session reported that,*"...I think SEDP has very little contribution towards on performance of student girls in science subjects since girls who studying the subject end up with scoring grade 'D' and 'F' in National Examination Results..."*

Shortage of teaching and learning materials like books in some subjects like physics, chemistry are very few compared to number of student girls studying science as result five students share one book and the absence of library not fever the performance of student girls.

Semi - structured Interview and Questionnaires were data collection tools used in this aspect. Study participants involved were head of schools, academic teachers, school inspectorate officers and the District Secondary Education Officer. These participants were involved in order to get their views on performance of secondary school girl students studied science subjects in the period of implementation of SEDP from 2011 to 2015. This findings show that 12 (80%) participant responses reported poor performance of secondary school girls in science subjects and 3 (20%) reported moderate performance of secondary school girls in science subjects. Table 4.9 presents a summary of participants' responses on performance of secondary school girls in science subjects during SEDP implementation phase (2011-2015).

Table 4.8 below shows the study participants' responses regarding performance of secondary school girl students in science subjects.

Responses	Number of respondents	Percentage (%)
The performance of secondary school girls students science in the period of implementation of SEDP was very poor	12	80
The performance of secondary school girls students science in the period of implementation of SEDP was moderate	3	20
Total	**15**	**100**

Source: Field data, 2018

One of academic teacher from secondary school A stated that, *"...Ah! My understanding about SEDP itself as a programme aimed to deal with the utilization of secondary school resources not directed specifically on performance of the student girls in science subjects include Physics, Chemistry and Biology. What I observed that performance of girls in science is drasscaly fall day to day when you look its examination results trend..."*

Another Head of secondary school D during Interview session had this to say:
"...I do not see the contribution of SEDP on performance of secondary school student girls in science subjects such chemistry, biology and physics because performance of mentioned subjects is not good when concern the National Examination results..."

4. 5. 7 Availability of standard laboratory and update laboratory equipments

Focus Group Discussion used to ask to science teacher so that to understand if in selected schools has laboratory and update laboratory equipment supporting them in teaching. Findings show there was no standard laboratory in each science subjects and update equipments in selected secondary school. Presented table 4.9 below

Responses	Number of respondents	Percentage (%)
Absence of standard laboratory and update laboratory equipments	16	100
Presence of standard laboratory and update laboratory equipments	0	0
Total	**16**	**100**

Source: Field data, 2018

Finding shows that 16 (100%) said that there was no standard laboratory and update laboratory equipments as result cause girls fail in performing well in science subjects.

Another interview with one participant revealed that although SEDP is there but most of school still experienced with the problem of poor standard laboratories and its equipment. The response was that; *"…in our school just like other many schools we have no standard laboratory, teaching and learning materials concerning science are not sufficient despite the fact that SEDP is there…"*

In normal sense, the school which has no this kind of teaching and learning resources the work of teaching is becomes very difficult because teachers rely on theoretical methodology of teaching something that does not help student to remember what are taught in the class session (Mwenda et al, 2013 ; Amukowa, 2013; Mwaba, 2011).

This finding also is akin to the study done by Forombi (1998) Observed that learning by doing is very important in sense that when the teacher teach through practical help student girl to recall and remember what they see' This way of teaching practiced especial in school which has update standard laboratory.

These findings are in line with Onwu (1999) who asserts that teachers encounter difficulties to assign homework to the learners due to the problem of inadequate

science resources like books and. Such situation is much worse to girls when compared to boys. Boys have the courage of going here and there searching for materials even from other schools, this is contrary to girls. In that matter the performance of girls without support cannot be realised.

4. 5. 9 The challenges encountered science teachers and girl students in whole process of teaching and studying science subjects.

Focus Group Discussion guide and Questionnaires questions were distributed to girl student and science teacher so that to aware with the challenges encountered science teachers and girl students in whole process of teaching and studying science subjects. The findings show that both science teachers and student encountered with a lot of challenges. This theme found into sub - section stated that school time table and girl students' performance in science subjects.

Table 4.10 below shows the study participants' responses about the challenges encountered science teachers and girl students in science subjects.

Responses	Number of respondents	Percentage (%)
Science teachers and girl students were encountered with a lot of challenges in whole process of teaching and studying science subjects.	45	80
Science teachers and girl students were not encountered with a lot of challenges in whole process of teaching and studying science subjects.	11	20
Total	**56**	**100**

Source: Field data, 2018

The above table show that out of 45 (80%) participants response suggested that in the process of learning faced with a lot of challenges starting from the places where they live around at school after school session in general challenges were a lot that made girl students failed to mention them. This circumstance contributed to poor performance of girls in science. The rest 11 (19.6%) participants stated that there was no challenges hindered them in teaching and learning science subjects.

> One girl student in focus group discussion had this to say, *"...Mmh! I like to study science and attending at school every day within a week. This will*

enable me to listen what the teacher taught in the particular topic and after class session also I would like to have extra enough time to interact with my fellow students in private studies at school so that to achieve my future expectation. But wonderfully enough, in our school it is difficult to perform science due to different chaos facing us like local houses where we live in the village know as "geto houses "which are too locally, after school session also at home I performed a lot of petty activities in which it consume a lot time to me and interfere my private time table of studying..."

Lack of hostel as crucial facilities support girls student in learning science subjects including physics, biology and chemistry in selected four secondary schools in Ileje district hindered life girl students life in future. This finding is supported by the study done by Evans (2006) who discovered that lack of hostel hinders the performance in student girls negatively way. Thus, performance of girls student especially in science subjects can well improved if there is friendly learning environment which support learning activities.

Girl students who live in hostel at school perform well because of having enough time to interact with other student and share ideas regarding science subjects. Also dormitory provide special chance and time to student to engage in learning programmes offered by to science teachers. Presence of hostel protects girl students from being affected with different risks like sexual harassment (Cerid, 1999; Lyndon 2006; Davis, 2001).

4. 6 The Contribution of BRNEd in academic performance of secondary school girl students in science.

This part intended to be aware on education stakeholders including the heads of school, District Secondary Education Officer (DSEO) Inspectorate Officers and Academic teachers and science teachers as among of BRNEd implementers whereas Interview, Questionnaires used for gathering information from study participant. The researcher first, want to know about trend of performance of secondary school girls

student in science subjects such as Biology, Chemistry and Physics in selected four secondary schools from 2011 to 2015 in Ileje District Council.

4.6.1 Girls students performance in physics in BRNEd from 2013 – 2015.

It is noted above that performance of girl students in science subject was moderate. This goes ahead when considering the impact of BRNEd regarding to form four national examination results. In 2013, 33 out of (3 9%) scored 'C', whereas 13 (39.0%) scored 'D' the rest 17 (52%) scored 'F'.

In 2014 30 girls students sat for four national examination 3 (10%) scored C, then 27 (90%) scored 'D', the rest 17 (52%) scored 'F' The trend goes alike in 2015 when 19 girls students sat for form four national exams, out of 2 (11%) scored 'C' 5 (26%) out of 19 scored 'D', remaining 12 (63%) scored 'F'. This is summarized Table 4.12 below.

Table 4.11 below shows National examination result indicating the performance of girl students in physics from 2013 to 2015.

PERFORMANCE IN PHYSICS					
GRADE	**YEARS**			**TOTAL**	**%**
	2013	**2014**	**2015**		
A	0	0	0	**0**	0
B	0	0	0	**0**	0
C	3	0	2	**5**	6
D	13	3	5	**21**	26
F	17	27	12	**56**	68
TOTAL	**33**	**30**	**19**	**82**	**100**

Source: NECTA, 2013-2015.

Generally, Performance in four selected secondary schools such as Ibaba, Itumba, Nakalulu and Lubanda in Ileje district in the period of five years started from 2013 – 2015 revealed that out of 82 girls students sat for form four national examination 5 (6%) scored 'C', 21 (26%) scored 'D', 56 (68%) scored F.

4. 6. 2 Performance of Girls students in chemistry in BRNEd from 2013 – 2015

Performance of girls students in science subjects are reflected by form four national examination results from 2013 – 2015. This indicates that in 2013, 91 girl students who sat for national examination 2 (2%) scored 'B', 4 (4%) scored 'C', whereas 6 (7%) scored 'D' and 79 (87%) scored 'F'. In 2014, total number of girl students sat for form four national examinations were 43, among them 1 (2%) scored 'B', 2 (5%) scored 'C, 7 (16%) scored 'D' the rest 33 (77%) scored 'F'. In 2015, girl students who sat for form four national examinations in physics subject were 30. Among them 1 (3%) scored 'C', 8 (27%) scored 'D' and 21 (70%) scored F.

Generally, performance trend of girls students in selected four secondary schools girls students including Ibaba, Itumba, Lubanda and Nakalulu in physics from 2013 – 2015 was that girls students sat for form four national examination in physics subject were 164, 3 (2%) scored B, 7 (4%) scored C, 21 (13%) scored D, the rest 133 (81%) scored F. This is summarized Table 4.13 below:

Table 4.12 Performance of chemistry from 2013 - 2015

PERFORMANCE IN CHEMISTRY					
GRADE	**YEARS**			**TOTAL**	**%**
	2013	2014	2015		
A	0	0	0	0	0
B	2	1	0	3	2
C	4	2	1	7	4
D	6	7	8	21	13
F	79	33	21	133	81
TOTAL	**91**	**43**	**30**	**164**	**100**

Source: NECTA, 2013-2015

4. 6. 3 Performance of girl students in biology Subject in BRNEd from 2013 – 2015

Performance of girl students in science subject is revealed by form four national results in biology from 2013 – 2015. This shows that in 2013, girl students who sat for form four national examination were 131 out of 5 (4%) scored 'B', 10 (8%) scored "C", 23 (18%) scored "D" the rest 93 (70%) scored "F".

In 2014, girl students who sat for form four national examination in biology subjects were 114 among them 3 (3%) scored 'B', 13 (11%) scored 'C, 59 (52%) scored 'D' 39 (34%) scored 'F. In 2015, total number of girl students who sat form four national examination in biology subject were 143 out of 4 (3%) scored 'C', 42 (29%) scored 'D', the rest 97 (68%) scored 'F'.

Generally, the trend of academic performance of secondary schools girl students in selected four secondary schools including Ibaba, Itumba, Lubanda and Nakalulu total number of girl sat for form four national examination were 388 out of 8 (2%) scored B, 27 (7%) scored 'C', 124 (32%) scored 'D', the rest 229 (59%) scored 'F'. This is presented Table 4.13 below:

Table 4.13 Performance of biology from 2013 – 2015

PERFORMANCE IN BIOLOGY					
GRADE	**YEARS**			**TOTAL**	**%**
	2013	**2014**	**2015**		
A	0	0	0	0	0
B	5	3	0	8	2
C	10	13	4	27	7
D	23	59	42	124	32
F	93	39	97	229	59
Total	**131**	**114**	**143**	**388**	**100**

Source: NECTA, 2013 - 2015

The review of performance of girls students from the year 2013 to 2015 revealed that girl performance in specific subjects was moderate in 2013 to 2015 few girls students who sat for form four national examination scored grade 'B', 'C' and 'D' that allowed them to continue with further studies but majority of them scored grade 'F' after completed their studies either they got married or join with other entrepreneurship activities that could not help them advancing their future carrier dreams.

4.6.4 Teachers and girls students knowledge of BRNEd

Focus Group Discussion and Questionnaires used to ask science teachers and student girls who studied science subjects intention was to understand whether participants had knowledge regarding the term BRNEd. Findings result show that majority of them understood the term. This presented Table 4.15 below.

Table 4.14 below shows participant responses Knowledge of BRNEd

Responses	Number of respondents	Percentage (%)
Science teachers and student girls' had Knowledge about BRNEd.	50	89
Science teachers and student girls did not awareness about BRNEd	6	11
Total	**56**	**100**

Source: Field data, 2018

The findings result show that 50 (89%) study participants stated that they aware with the term because during in implementation of BRNEd science teachers were not involved in directly but some extent strategies formulated by educational officials to ensure effective implementation of BRNEd alerted science teachers to work hard in teaching activities in order to obtained quality big result in science subjects including biology. 6 (11%) participants reported to have a little knowledge about BRNEd due to the fact in the period of implementing BRNEd were not involved.

4.6.5 The extent which Big Result Now in Education (BRNEd) contributed in academic performance of girl students in science subjects.

Semi -structured Interview, Focus Group Discussion and Questionnaires used 87. 31 participants including academic teachers, science teachers, Heads of school, DSEO and Inspectorates. The findings show that majority of study participants responded that to some extent BRNEd has contributed slightly in academic performance of girl students in science subjects. It presented Table 4.16

Table 4.15 below table shows the study participants responses to the extent in which BRNEd contribute in academic performance.

Responses	Number of respondents	Percentage (%)
BRNEd has contributed slightly in academic performance of student girls in science subjects.	21	67.7%
BRNEd has contributed nothing on performance of student girls in science subjects.	10	32%
Total	**31**	**100%**

Source: Field data, 2018

The results revealed that 21 (67.7%) study participants reported that BRNEd has contributed slightly in academic performance of girls student in science subjects including biology, chemistry and physics selected secondary schools in Ileje district council. but somehow the results was impressed compared to other previous policy intervention. The rest 10 (32%) participants recommended that BRNEd has contributed nothing focused to see the big results rather than directed on improving performance of girls students in science subjects. Also the study participants responded that implementation of BRNEd directed to deal with two subjects include biology and mathematics and ignored other subjects.

Therefore, involvement of educational stakeholders like science teachers is very important because teachers were the one who acted as cornerstone on implementing BRNEd but failure to involve in academic matters created unawareness of having an idea about "what", "how" "when" implementation of BRNEd reached stated objectives.

One of participant from secondary school 'C' during interview session blamed the system in which government officials used to implement BRNEd. He responded that*"…BRNEd contributed in improving performance this evidenced with creating a tendency of doing exams in several time. Although the performance of our girl students in science subjects could not match with for boys but few of them were doing well…"*

Another science teacher response during interview stated that BRNEd contributed in academic performance of girls. She had this to say, "…*BRNEd has positive impact in the performance of girls due to the fact that teaching and learning materials at least were available like stationeries facilities, friendly teaching and learning environment this went hand in hand with providing motivation to science teachers and girls who performed well in science subjects…"*

One of inspectorate in interview guide session viewed that Big Result Now in education (BRNEd) has not contributed in the performance of girls studying science subjects. He stated that,*"…when we are going for the inspection of schools, we find that still a large number of schools in some extent has resources that support teachers in teaching activities. Being the case it is obvious that BRNEd has slightly to do in academic performance due to its strategies were used in implementing BRNEd directed to ensure good perform …"*

Another study participant during Focus Group Discussion guide argued that, *"… I think BRNEd has contributed nothing in performance of student girls in science subjects such as physics, biology and chemistry, the policy also insisted more in two subjects such as mathematics and biology and ignore other subjects which are the core subjects among the natural science subjects…"*

4.6.6 Motivation to science teachers

Focus Group Discussion used to extra information from 16 study participants including science teachers. This findings show that all of them responded that science teachers to some extent were motivation. It summarized Table 4.17 below.

Table 4.16 below table shows the study participants responses regarding to motivation science teachers

Responses	Number of respondents	Percentage (%)
Science teachers were motivated	16	100%
Science teachers were not motivated	00	00%
Total	**16**	**100%**

Source: Field data, 2018

Findings results show that 16 (100%) participants responded that during the period of implementing BRNEd science teachers were motivated compared to previous policy intervention like SEDP.

One of Science teacher from school 'D', he stated that, *"To me implementation of BRNEd was too generally but its nine initiatives aimed to improve performance but some of initiatives were well implemented like motivation to science teachers for instance. Science teachers were assigned to the work of marking examinations…"*

4.6.7 Availability of seminar/Training to science teachers

Focus Group Discussion guide and Questionnaire used by researcher to 17 study participants including science teachers and District Secondary Education Officer (DSEO). Out of 17, 16 (94%) agree that they were involved in some extent in training/seminars. 1 (6%) responded that there was no seminar or training. The findings results illustrate that science teachers in some extent were involved in different seminars in and learnt how to improve academic performance including science subjects. This presented Table 4.17 below.

Table 4.17 showing participants responses of availability of seminar/Training to science teachers

Responses	Number of respondents	Percentage (%)
Presence of seminar/Training to science teachers	16	94%
Absence of seminar/Training to science teachers	01	6%
Total	**17**	**100%**

Source: Field data, 2018

The above table revealed that 16 (94%) stated in the period of implementing BRNEd seminar/training was carried out to science teachers. The rest 1 equal to (6%) participant' reported that there was problem of the absence of seminar/Training to science teachers.

The challenges faced most of educational stakeholders in implementation of BRNEd from 2013 to 2015 in selected secondary schools.

This question was required to be answered 22 employed study participants like Head of school, science teachers and school Inspectorate whereby interview guide and questionnaire methods are used to ask questions to 22 equivalents to (100%) out of 22 study participants responses argued agree that is true that implementation of Big Result Now in education (BRNEd).

Therefore, implementers like science teachers, head of school and school Inspectorate faced a lot of challenges like poor motivation to teachers, absence of seminars, high enrollment rate compared with a number of science teachers, insufficient fund in fulfillment all requirements and inspection programme depends on geographical location of a particular area. These were among of the problem hamper effective contribution of BRNEd on performance of girl student in science subjects such as physics, chemistry and biology.

The essence is that their performance is tends to be improve in some extent in science. This shows that the contribution of Big Result Now in Education (BRNEd) in academic performance of girl students are considered but not directly way. The interview with a number of stakeholders as well as the review of the National examination results in mentioned years show that BRNEd contributed in improving academic performance in generally not specific for girl students studying science subjects. The question rise hear is that is true that BRNEd its initiatives were too general of course so how few girl students performed in science as we have seen performance results in mentioned period?

4.7 Contribution of Fee Free Education in performance of secondary school girl students in science subjects from 2016 to 2017.

This section aimed at finding out the educational stakeholders' views like head of school, District Secondary Education Officer (DSEO) Inspectorate Officers, Science teachers and Academic teachers Fee Free Education contribution on academic performance of girl students in science subjects at four selected secondary schools in Ileje district council.

The research tools employed by the researcher for gathered information from field participants field including Interview, Focus Group Discussion, Questionnaires in which the questions has been already prepared to obtain responses from targeted population in respective community areas.

However, the findings results pertaining to find out the contribution of Fee Free Education on academic performance at selected four secondary schools girl students in science subjects in Ileje District Council from 2016 to 2017. The researcher first, wanted to know about trend of performance of secondary school girls students in science subjects such as Biology, Chemistry and Physics from 2011 to 2015 at four (4) selected secondary schools such Ibaba, Itumba, Lubanda and Nakalulu found in Ileje District Council.

Documentary review revealed that in the year 2016 and 2017. In 2016, girl students who sat for form four examination in physic subjects were 38, among them 1 (3%) scored C, 9 (24%) scored 'D' the rest 28 (74%) scored F. In 2017, a number of girl sat for form four national examination in physics subjects were 26 whereas 1 equal to (4%) scored 'C', 5 (19%) scored 'D' the rest 20 (77%) scored 'F'.

The general, performance in two years in physics subject at four selected secondary schools including Ibaba, Itumba, Lubanda and Nakalulu , the students who registered sat for form four national examination were 64, out of 2 (3%) scored C, 14 (22%) scored D and remaining 48 (75%) scored 'F'. It summarized Table 4.18 below.

Table 4.18 shows performance of girl students sat for form four national examination.

PHYSICS				
Grade	**YEAR**		**TOTAL**	**PERCENTAGE**
	2016	**2017**		
A	0	0	0	0.0
B	0	0	0	0.0
C	1	1	2	3.0
D	9	5	14	22.0
F	28	20	48	75.0
Total	**38**	**26**	**64**	**100.0**

Source: NECTA, 2016 – 2017

4.7.2 Performance of girl students in chemistry from 2016 -2017

The findings obtained from documentary review evidenced that failure of girls students in science subjects are following. In 2016, girl students sat for form four national examination were 54 (27.8%) scored 'D' 58 (72.2%) scored 'F'. In 2017, girl students registered sat for form national examinations were 26 (26.9%) the rest 19 (73.1%) scored 'F'. Generally, 80 girl students therefore sat for form four national examination result indicated that 15 (27.5%) scored 'D' the rest 37 (72.5%) scored 'F' but none of them obtained 'A' nor 'B' as indicated Table 4. 19 below

Table 4.19 shows the Performance of girl students in chemistry from 2016 - 2017

CHEMISTRY				
GRADE	**YEAR**		**TOTAL**	**PERCENTAGE (%)**
	2016	**2017**		
A	0	0	0	0.0
B	0	0	0	0.0
C	0	0	0	0.0
D	15	7	22	28.0
F	39	19	58	72.0
TOTAL	**54**	**26**	**80**	**100.0**

Source: NECTA, 2016 – 2017.

4.7.3 Form four national results show performance of girl students in Biology from 2016 -2017.

Poor Performance trend goes further in Biology in 2016 whereas girls students sat for form four national examination were 113 out of 3 (2.2%) scored 'C', 34 (26%) scored 'D' and the mass of 96 (72.1) scored 'F'. The following year 2017, same situation occurred whereby the number of girls students sat for form four national examination 164 out of 1 (1%) scored 'B', 7 (4.2) scored 'C', 60 (37) scored D, 96 (58.5%) scored 'F'. For the two years it is revealed that among 297girl students sat for form four national examination in chemistry subject the results indicate that for two years out of 1 (0. 3%) scored 'B', 10 (3.3%) scored 'C, 94 (32%) scored D and the rest 192 (65.0%) scored 'F'. The mass failure of girls students in science subjects for instance biology revealed that Fee Free Education has contributed nothing specifically on improving academic performance of girls students at selected four secondary schools including Ibaba, Itumba, Lubanda and Nakalulu in Ileje district. This presented Table 4.20 below.

Table 4.20 national examination results showing the performance of girl students in Biology from 2016 - 2017

PERFORMANCE IN BIOLOGY				
Grade	**YEAR**		**TOTAL**	**PERCENTAGE**
	2016	**2017**		
A	0	0	0	0
B	0	1	1	0.3
C	3	7	10	3
D	34	60	94	32
F	96	96	192	65
TOTAL	**133**	**164**	**297**	**100**

Source: NECTA, 2016 – 2017.

This review of the performance of girls from the year 2016 to the year 2017 has shown vividly that the performance of girls during at that time was poor. The mass of girl students scored 'D' and 'F' in physics, chemistry and biology. For a girl to get division 'D' or 'F' obvious that the continuation with further studies is impossible thus the FFE objectives were not met.

Teachers and Students awareness about FFE

The findings were collected by used Focus Group Discussion and Questionnaires methods to study participants including science teachers and student girls who studied science subjects in order to understand if they have knowledge regarding the term Fee Free Education. The findings show that high a number of them did not have knowledge in details about the policy. This summarized Table 4. 21 below

Table 4.21 shows the respondent responses about if they had knowledge about FFE

Responses	Number of respondents	Percentage (%)
Science teachers and student girls had knowledge about Fee Free Education	50	89
Science teachers and student girls did not have knowledge about Fee Free Education	6	11
Total	**56**	**100**

Source: Field data, 2018

The finding results show that, out of 50 (89%) study participants had idea about Fee Free Education but they did not have enough knowledge in details regarding Free Fee Education because during the implementation of this policy science teachers, students and parents in community areas were not involved in order to be aware with the idea of Free Fee Education in details and understanding intended general purpose. In this situation science teachers remained being dilemma to implement unknown policy intervention. The rest 6 (11%) participants had a little awareness about Fee Free Education.

4.7. The extent in which Free Fee Education contribute in academic performance of girl students in science.

Semi - structured Interview, Focus Group Discussion and Questionnaires were used responded by 31 study participants including academic teachers, science teachers, Head of school, DSEO and Inspectorate in order to give out their views about contribution of Free Fee Education in academic performance of secondary school girl students in science subjects. The findings show that majority of study participants suggested that Fee Free Education has contributed nothing in academic performance of girl students in science subjects such as physics, chemistry and biology. This presented Table 4. 21below

Table 4.22 below shows the respondent responses about the extent in which FFE contribute on performance of girl student in science subjects

Responses	Number of respondents	Percentage (%)
Free Fee Education has contributed nothing in academic performance of girls students in science subjects	21	67.7
Free Fee Education has contributed slightly in academic performance of girls students in science subjects	10	32.0
Total	**31**	**100**

Source: Field data, 2018.

Results show that majority of study participants whose number is 21 out of (67.7%) reported that Free Fee Education has contributed nothing in academic performance of secondary school girls students in science subjects because implementation of Free Fee Education did not focused directly to improve academic performance of girls students who studying science also they suggested that implementation of FFE dealt with increasing enrollment of girls at secondary school rather focuses in on how to improve academic performance of girl students in science subjects. The rest 10 (32.0%) suggested that in some extent Free Fee Education contributed on increasing the number of student girls who studying science subjects.

The interview with study participants revealed that Free Fee Education has only helped to increase the students' admission rates rather than improving academic performance of girl students in science subjects.

One study participant argued,

> *"...Fee Free Education actually has played a nice role in increasing the admission rates in both primary and secondary schools, however its contribution in academic performance of girls students is negligible. This is because a number of schools although admission rates have gone higher but the availability of teaching and learning facilities like laboratories, library are insufficient..."*

Another study participant during Focus Group Discussion session narrated that Free Fee Education has no contribution in academic performance of girls students in secondary schools specifically science subjects. He argued that,

> *"...actually Free Fee Education has done a lot especially in increasing the enrollment rates in primary as well as at secondary schools. In secondary schools particularly the academic performance of girls students it has done nothing simply because the issue of academic performance does not rely on work of science teachers even parents have the role to play and take their responsibility to make sure that their children are studying hard and perform better in respective science subjects..."*

Another participant from school B had the same idea that; *"...Free Fee Education has contributed nothing in academic performance of girls students in science subjects although it has played important role in increasing enrollment rate of students in school but still academic performance in science subjects especial for girls students is poor..."*

The above participants' views imply that it was true that Free Fee Education tends to increasing enrolment rate of students in community secondary schools rather than to improve the academic performance of girl students in science subjects. Even enrollment rate at secondary school did not compared with the number of teachers.

This situation led science teachers' fail to manage students in the classroom. Free Fee Education also reduced co - operation between science teachers and parents in sense that most of parents do not have time to communicate with science teacher to ask for continues assessment for their children but it must clear noted that performance of girl is not depended on science teachers or policy contribution even parents had special chance to play towards on improving academic performance of girls students in science subjects hence, currently, Free Fee Education makes parents became very dormant and forgot their responsibilities concerning academic issues.

The interview with one participant revealed that Free Fee Education has nothing contributed in performance of girl students in this district. She argued that *"…to me I think Free Fee Education has not contributed anything in the performance of girl in our school. This is because the funds which are brought by the government as subsidies are still insufficient to accommodate all the schools requirements…".*

Head of school from secondary A during interview session had this to say, *"In my understanding what I think Fee Free Education has formulated possibly to improve standard performance in education system starting from secondary level but not specifically for improving performance of girls students in science subjects such as physics, biology and chemistry".*

Another school inspectorate response in interview session viewed that Free Fee Education in some extent increase girls rates in secondary school as compared to boys it does not meant in improving performance of girl students in science subjects although enrolment is high but student girls were the one who proof much failure in science subjects like physics, chemistry and biology compared to boys. She said that *"…to some extent in academically, Free Fee Education has nothing contributed on performance of girl in science subjects its contribution is not yet researched in other word I can say the stated policy has a little contribution in academic performance of girls students in science subjects such physics, chemistry and biology…".*

The above view is corresponded with the idea of District Secondary Education Officer (DSEO) He stated that *"to me Free Fee Education has very slight contribution it has not directed specifically for improvement the performance of girls students in generally"*

Availability of enough funds to finance school budgets

In this theme, semi - structured Interview guide, and Questionnaires methods of data collection were used to ask questions to five (5) study participants such as Head of school, DSEO in order to understand whether the provision of fund is enough in fulfillment all school requirements. The findings from the field show that high number of s response study participants stated that provision of fund supported by the government to finance all school requirements was not enough because of school demand to be too high.

Table 4.23 Table below illustrates the participants' responses regarding availability of fund to finance school requirements

Responses	Number of respondents	Percentage (%)
Provision of fund was not enough to finance school requirements.	5	100
Provision fund was enough to finance school requirements.	0	00
Total	**5**	**100**

Source: Field data, 2018.

Finding results show that majority of the study participants whose number was 5 (100%) stated that funds which were provided by the government in financing education issue at selected four secondary schools including Ibaba, Itumba, Lubanda and Nakalulun in district was not enough in the reason that demand was high than available fund.

The head of school A during the interview period, he said that,

> "…*Free Fee Education lead the budget to very limited because amount of money funded by the government is less compared with available demands for instance in this school I have 313 total number of students include girls in which amount of Capitation Grant (CG) received is 521,980/= help to run all school programmes and other*

> *requirements like 35% used to run school, administration 10%, for manner* repairs 30%, running academic issues, 10% to buy medicine for girls…"

Another District Secondary Education Officer (DSEO) had this to say*, "Capitation Grant provided by the government to finance all school budget was not satisfactorily enough because school demand is high but fund also is very limited…"*.

Therefore, good performance in science subjects including biology, physics and biology required a number of requirements such as update teaching and learning facilities like science books, laboratories equipments, friendly environment condition of teaching and learning. There was a problem of shortage of necessary facilities which were the one of supplement materials in teaching and learning process. Findings indicate that Fee Free Education has contributed nothing in academic performance of girls in science subjects.

Hence, the performance of girls in respective science subjects at selected four secondary schools was not good as far as performance is concerned. This is due to the fact that girl students continued with further studies in science subjects they must score good grades in science subjects. If you look at the performance of girls at four schools, the girls got A or B in science subjects. In that matter upon relying on the performance of girls students for form four national examination results obvious FFE has contributed nothing in performance of girls in science subjects.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

This chapter presents discussion of findings gathered from the field study in details focused on specific objectives of the study, research questions and depth information about at examining contribution of SEDP, BRNEd and Free Fee Education on academic performance of secondary school girl students in science subjects such as physics, chemistry and biology in Ileje District Council from 2010 to 2018.

Specific objectives in this study were to identify the contribution of SEDP in academic performance of secondary school girl students in science subjects in Ileje District Council between 2011 and 2015, to determine the contribution of BRNEd in academic performance of secondary school girl students in science subjects in Ileje District Council from 2013 to 2015, to find out the contribution of Free Fee Education Policy on academic performance of secondary school girl students in science subjects in Ileje District Council from 2016 to 2017. This chapter also presents discussion of different mechanisms to show contribution of SEDP, BRNEd and Free Fee Education on academic performance of secondary school girl students in science subjects such as physics, chemistry and biology.

5.2 The contribution of SEDP in academic performance of secondary school girl students in science subjects in Ileje District Council between 2011 and 2015.

In this section various educational stakeholders such as District Secondary Education Officer (DSEO) District school Inspectorate, head of school and academic teachers were involved in this study in order to point out their views on contribution of SEDP in academic performance of secondary school girl students in science subjects like physics, chemistry and biology. The methods of data collection were used include Interview as well as Questionnaires to the study participants for responses. All the questions were asked to show reflection on contribution of SEDP in academic performance of secondary school girl students in respective science subjects.

The findings show that there was a little contribution of SEDP on performance of secondary school girl students in science subjects. The results from the study areas revealed that SEDP has a little contribution in academic performance of secondary school girl students in science subjects since the policy was not directed specifically in academic performance of girl students in respective subjects but SEDP contributed to other issue regarding improvement of academic matters. For instance 31 the study participants out of 21 (66.7) suggested that SEDP has very little contribution in academic performance of secondary school girl students in science subjects the rest 10 (32.5%) participants argued that SEDP has nothing contribution in academic performance especially in science subjects this entails that implementers like teachers, parents in community areas and students were not involved in whole process of policy formulation, planning rather were involved only in implementing policies interventions. Thus is why it leads to bring negative outcomes in academic performance for secondary school girls who studied science subjects.

Also environment condition during implementation of SEDP was not support teachers the work of teaching thus is why even performance in science for form four national examination results was not good for instance the performance of girl students in Chemistry for five years (2011 to 2015) indicates that among 277 girl students who sat for form four nation examination out of 3 (1%) scored "B", 7 (2%) scored "C", 53 (19%) scored "D" and the rest 217 (78%) scored "F". This result evidenced that high frequencies of girl students end up with scoring F in science subjects see Table 4.5

Knowledge about SEDP most of study participants like parents, science teachers and students did have an idea about SEDP because prior and during implementation the policy mentioned participants were not involved. Findings show that out of 56, 50 (89%) did not aware with the policy programme this was among of the causative hindered the ineffective contribution of SEDP in academic performance of secondary school girl students in science subjects. See Table 4.6

One of science teacher from secondary school A during Focus Group Discussion guide had this to say, "… *In some extent SEDP contributions have been seen in other aspects like construction of Laboratories in some of secondary schools but in real life situation, in this District many secondary schools has no laboratory what they have is an examples of laboratories as the result science teachers use a lot of time to teach in theoretically due to inadequate of update science equipment…"*

This finding supported by Makoye (2014) who pointed out that there was no significant change during the implementation of SEDP as one of policy interventions. Also, he continued by saying that SEDP it strategies are not directed in gender categories either male or female this was too generalized as well as in academic performance SEDP has treated nothing to improve performance of girls in specific science subjects.

5.3 To determine the contribution of BRNEd in academic performance of secondary school girl students in science subjects.

The study participants like teachers, parents, DSEO, District school inspectorates and students brought their views about the contribution of BRNEd in academic performance of secondary school girl students in science subjects. Also the study participants were interviewed during interview session and focus group discussion, the findings show that BRNEd has contributed little in academic performance of girl students in science subjects although BRNEd was not directed specifically for performance of girls in science but it affect girls indirect thus is why the performance of girls during BRNEd seemed few number of girls perform well in science subjects.

The findings revealed that few number of girl students done better in science for instance in 2013 to 2015 total number of girl students sat for form four national examination in biology subjects at four selected secondary schools were 388 whereas 8 (2%) scored B, 26 (7%) scored C, and 124 (32%) scored D the rest 229 (59%) scored F. In biology also girl students tends to perform well compared to previous policy intervention in which none of girl students scored grade B. this result imply that BRNEd has contributed in academic performance of secondary schools girl students in science subjects. See table 4. 13.

One of study participant during an interview session, he had this to say "*... During the period of implementation of BRNEd teachers were highly motivated even there was a tendency of attending seminars but not frequently in some extent they learn a little strategies of teaching from other teachers and share experience in how to teach science subjects thus is why even few number of girl students perform well in science subjects but in reality there was no official way of involved them before and during the implementation of BRNEd…"*

In supporting this finding cook (1980) pointed out that motivation tends to enhance for improving academic performance. Motivation can started from any level such as National, Region, District and school levels depend on kind of motivation, teachers and girl student were needed to be motivated so that to encourage them to be committed in the work of teaching. Motivated can offered by government officials, or employers like District Executive Director (DED), parents must motivated their children, teachers can motivate girl students also teachers themselves need to be motivated by respective administration (Ofoegbu, 2004). Therefore, motivation in real life experience helps to enhance teachers working hard in teaching process.

Also the findings show that stakeholders like science teachers, parents and students have a little knowledge about BRNEd due to the fact that these people were not involved officially before and during in implementation of the policy intervention. This may be could be a reason that led uncesseful of BRNEd contribution in academic performance of secondary school girl students in science subjects. This study is in line with the study which done by Sigala and Komba (2015) who asserted that BRNEd initiatives are not well known by some of educational stakeholders like teachers who are mainly implementers in implementing BRNEd due to the fact that teachers are not involved during the process of planning and formulating the policy.

Also the study done by Lugenge (2015) the findings show that BRNEd did not targeted to treat the academic outcomes especially on improving performance of girls in science subjects due to the reason that performance of girls in science subjects was

tended to be low as well as teacher were taking their responsibility to work hard but were paid insufficiently.

5.4 To find out the contribution of Free Fee Education Policy on academic performance of secondary school girl students in science subjects

In this study field participants were used to give out their view on Free Fee Education in academic performance of girls in science subjects. The study used various tools like interview guide; focus group discussion guide and questionnaires questions. The findings revealed that Free Fee Education mostly focused on increasing enrolment rate of girls in community secondary schools and even documentary review especially statistics data shows that currently a number of girls in secondary school are high compared to girls. The question comes, if enrolment is high why the performance of girls in science subjects is poor? By this reason the findings indicated clear that Free Fee Education has contributed nothing in performance of girls in science subjects like physics, chemistry and biology this is evidenced by performance of girls in NECTA result during in 2016/2017 students girls who sat for NECTA did ever scored B in respective subjects compared to previous policy which seemed to improve academic performance in science subjects. One of study participant from school C during interview session, He had this to say,

> "*…this school there is a problem of scarcity of teaching and learning resources like science text books for instance in physics subject, the problem of not having papers used for preparing exams. Therefore, this situation led science teachers proof failure to prepare monthly test to girl students for instance, in this school in 2016 total number of all students were 299 but amount of money received from the government is 934,752/ as the time went on the number of students increased from 299 up to 410 in 2017/2018 hence poor performance is inevitable for girl students in science subjects…".*

Above findings were supported by the study done by Kilonza (2007) who asserted that provision of fund by the government to finance education in secondary schools in Tanzania was too limited in such a way that they left away very crucial areas that enables teaching and learning to be smoothly foristance area including teaching and

learning facilities like laboratories, libraries to each science subjects led the Fee Free Education contribution academic performance especial girl students in science to proof failure. This caused by teaching methodology used by science teachers like theoretical kind of teaching and teacher centered way of teaching always girl students depend much from the teacher and learn through memorizing, however this was not enable them to remember what has been taught by science teacher of specific subjects. Therefore, learning by doing is most important applicable technique in teaching science and learning science whereby practical methodology kind of teaching enabled girl students to by seeing and remember what has been taught in the class in during in final examination tends to remember and perform well in science subjects.

Finding show that FFF has contributed very little in academic performance of secondary schools but not much because the performance of girls in science subjects still declined a day after another because of shortage of science teachers. This evidenced from form four national examination results in Physics subject. The girl students sat for form four national examination from 2016 to 2017 in physics subject were 64 out of 2 (3%) scored C, 14 (22%) scored D and 48 (75%) scored F. See table 4. 18. This indicate low performance of girl students in physics subject this may sometime caused by shortage of physics teachers in selected four secondary schools. Therefore to ensure smoothly contribution of FFE in academic performance of secondary school girl students in science subjects, the government should employed enough science teachers who teach physics subjects.

Above findings were corresponded by the work done by Ndalichako and Komba (2014) pointed out that inadequate number of science teachers in government and community secondary schools was a national wide phenomenon. This implied that the problem of inadequate number of sciences teachers not only prevailing in selected four secondary schools in Ileje district also the same problem tends to appear in other district specifically in Tanzania.

Perception of parents towards implementation of Free Fee Education in the community area, most of parents perceived Fee Free Education both in positive and negative way. One of parent from ward A during interview session she had this to say,

> (…*To Free Fee Education was good because of the government decided to provide education to all children without regard economic background of a particular society as reducing cost contributions from parents and increased the enrolment rate of girl students at community secondary schools but in other side Fee Free Education lead to a lot of contributions at community secondary schools. Also it most of parent became dormant this means they left away their responsibilities because currently Free Fee Education…").*

This findings revealed that most of parents in community they had different interpretation about Fee Free Education in real life failed to understand that they supposed to contribute in supporting the government toward provision of education hence to improve academic performance of secondary school girl students in science subjects.

USAID (2007) Free Fee Education in most of developing countries including Tanzania was no panacea. This revealed that majority people in the community the act of government to abolish Fee in government secondary schools include community schools open the room for increasing indirect cost in which most of parents in community failed to contribute, this situation hindrance ineffective contribution of FFF on academic performance of secondary school girl students in science subjects. Also USAID members suggested that FFE alone cannot able to improve academic performance for girl students in science subjects other factors should be considered.

Findings results result revealed that study participants 5 (100%) viewed about provision of fund to finance education stated that funds which were provided by the government in financing education issue at selected four secondary schools including Ibaba, Itumba, Lubanda and Nakalulu in district was not enough due to the fact that demands were high than allocated fund.

This findings were supported by World Bank (2001) and UNESCO (2010) asserted that Free Fee Education with no adequate government support fund tends to strengthened the decline of academic performance of secondary school girl in science subjects because all school requirements needs adequate fund in fulfillment the school demands contrary to this led to the decline of academic performance of secondary school girl students in science subjects. Therefore, the governments should increasing fund that could enable to run all school activities so that to ensure contribution of FFF on academic performance of secondary school girl students in science subjects.

The findings also revealed that FFE focused on increasing enrolment rate of girls students at community secondary schools without compared to the number of science teachers at specific secondary school this led negative interpretation of FFE contribution on academic performance of secondary school girl in science subjects like physics, chemistry and biology. For instance at four selected community secondary schools found to have one physics teacher or biology teacher and he supposed to attend all periods to each class hence science teachers sometime are overworked.

This findings were in line with the study which done by Gatheru (2008) who contended that restrictions towards implementation of FFE including high enrollment rate of students rate which did not match with a number of teachers were overwhelmed and failed in providing special attention for girl students in the class for instance marking assignment given them, it led poor performance of girls in science subjects.

CHAPTER SIX

SUMMARY, CONCLUSION AND POLICY IMPLICATIONS

6.0 Introduction

The study presents the accurate summary of the study facts which related with the objectives of the study. Also give the logical summary associated with conclusion. Furthermore, it provides for paying attention for further studying concerning the contribution of policy shift on performance of secondary girl students in science subjects.

6.1 Summary and conclusion of the findings

This study is all about views on the contribution of policy shift on performance of secondary school girl students in science subjects: it was a case of Ileje District Council. The main objective was to examine the contribution of SEDP, BRNEd and Free Fee Education Policy in academic performance of secondary school girl students in science subjects in Ileje District Council from 2010 to 2018. This objective went hand in hand by three specific objectives like to identify the contribution of SEDP in academic of secondary school girl students in science subjects in Ileje District Council between 2011 and 2015, to determine the contribution of BRNEd in academic performance of secondary school girl students in science subjects in Ileje District Council from 2013 to 2015 and to find out the contribution of Free Fee Education Policy on academic performance of secondary school girl students in science subjects in Ileje District Council from 2016 to 2017.

6.2 Conclusion

The purpose of this study was to examine the contribution of SEDP, BRNEd and FFE on the performance of secondary school girls in science subjects in Ileje district, the findings from chapter four shows that SEDP, BRNed and FFE has not significant contribution of girls in science subjects since a number of schools still do not have laboratories, better science books as well as teaching and learning materials. The findings signify that there is a need for the government and other stakeholders to formulate a policy which directly specifically for girl students so that to support them

in academic regarding science subjects this may help to improve academic performance of girls in science and enables them to perform better not only in science but also in all subjects.

6.3 Policy implications

It recommended that government of United Republic of Tanzania should make sure to involve science teachers in short term course programme that aimed at providing knowledge about what, how and when to implement policy intervations immediately before the process of implementing started.

Also the government should conduct different seminar which focused on providing knowledge to educational stakeholders including science teacher, students and parents and others to ensure effective contribution of SEDP, BRNEd and Free Fee Education on improving academic performance of secondary schools girls students in science subjects including physics, chemistry and biology.

The government should discourage optional subjects by constructing laboratory and increasing laboratory equipments to ensure that all girls students must studying science subjects through employing more female science teachers who could act as a role model and motivate girs as well as encourage them to study science subjects. Government should realocated some of percentage that could used to motivate girls students who pass well in science subjects including physics, biology and chemistry.

Inadquate of learning facilities compared to the number of students, it recommended government should increase Capitation Grants (CG) with regarding specific school demands so that to fulfil its requirements and the government should formulate a policy which could support girl students in studying science subjects.

6.4 Area for further studies

- ✓ The study is required to find out the factors which enhancing boys to perform better in science subjects compared to girl students.
- ✓ The study is needed to examine on the role played by parents in implementing Free Fee Education policy in Tanzania.
- ✓ This study was conducted at four selected secondary schools including Ibaba, Itumba, Lubanda and Nakalulu in Ileje district, Songwe region. The findings reflected the selected cases in the intention of generalization. Therefore, in this case the same study can be carried out in other areas in Tanzania.

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APPENDICES

APPENDIX I

School Profile being completed by the School Headmaster/Headmistress.

Dears School Headmaster/Headmistress

I am Mokami M. Chacha, a Master of Arts in Education student in the Faculty of social sciences, Mzumbe University. As part of the requirements for my degree programme, I am conducting a study on **"Views on the contribution of policy shift in academic performance of secondary girl students in science subjects".** I therefore kindly request you to help me in this study by completing the school Profile.

You are kindly requested to respond carefully to each question and give your response to the best of your knowledge. Your answers are highly confidential and any information gathered here will be used for research purposes only and not otherwise. Your participation is voluntary and you can stop at any time, though I will be grateful if you can complete the in full.

Time: ---------- hours

1. Name of school ---------- Ward ---------- Division ----------
2. Registration number ---------- ---------- Year ----------
3. Distance from District headquarters to school location (Km) ----------
4. Nature of the school resident (please tick)

Town centre	
Rural area	

5. Number of students studying science subjects

FORM	BOYS	GIRLS	TOTAL
III			
IV			
TOTAL			

6. Number of qualified science teacher

TEACHERS		
Male	Female	**Total**

7. The qualifications of science teachers

LICENSED			**DIPLOMA**			**DEGREE**		**MASTERS**				**TOTAL**
Male	Female	**Total**	Male	Female	**Total**	Male	Female	**Total**	Male	Female	**Total**	

8. General trend of academic performance of girl students in secondary school (CSEE) in past eight years ago from 2010 to 2017

DIVISION	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
I								
II								
III								
IV								
FAILS								

9. Presence of necessary teaching and learning science facilities (please tick)

TYPE OF LEARNING AND TEACHING SCIENCE FACILITY	**ADQUATE**	**INADQUATE**
Relevant science textbooks		
Laboratory for each science subject		
Relevant laboratory equipment		
Classrooms size		

Thank you for gratefully Cooperation.

APPENDIX II

Questionnaire to Girl students Studying Science Subjects.

Dear Student girls,

I am Mokami M. Chacha, a Master of Arts in Education student in the Faculty of social sciences, Mzumbe University. As part of the requirements for my degree programme, I am conducting a study on ***"Views on the contribution of policy shift on performance of secondary girl students in science subjects****". I therefore kindly request you to help me in this study by completing this questionnaire.*

You are kindly requested to respond carefully to each question and give your response to the best of your knowledge. Your answers are highly confidential and any information gathered here will be used for research purposes only and not otherwise. Your participation is voluntary and you can stop at any time, though I will be grateful if you can complete the questionnaire in full.

Form No ---------- Name of school ----------Ward ---------- Division ---------- Number of girls ---------- Age ---------- Signature of the respondent approval ---------- Date ----------

Dear students before proceed with our task it is important to understand the meaning of SEDP, BRNEd and Fee Free Education

- SEDP is secondary education development programme or plan mainly for dealing with improving education maters in secondary school
- BRNEd this means Big Result Now in education entails for reviewing pass mark in CSEE that is to increase academic performance of secondary school girl students.
- FFE refers as the policy that aimed the provision of Fee Free Education without depending on contributions from parents or guardians.

Time: ---------- hours

Please choose the correct answer

1. Have you ever heard the term SEDP, BRNEd and FFE?

a. Yes

b. No ( )

2. SEDP, BRNEd and FFE entails to deal with the following in secondary school except one (please choose incorrect answer)

a. increase students enrollment

b. Improving girl's performance

c. To finance education matters

d. Provision of quality education

e. Provide free education to all Tanzanians children

f. To increase the spread of HIV disease ( )

4. Do you have library for each science subjects in your school?

a. Yes

b. No ( )

5. In your school do you have enough relevant science text books?

a. Yes

b. No ( )

How many student share one science book

a. 1

b. 3

c. 4

d. 5 ( )

6. Do you have enough time to learn science through practice in laboratory room?

a. Yes

b. No ( )

7. Do you given individual or group assignment by science teachers after completion of specific topic?

a. Yes

b. No ( )

8. If (7) is yes please mention a number of assignment or test given by teachers after completion the topic ----------

Social Practices and Girl students Performance in Science Subjects

1. Are you involve in other activities at home compound differently from studies after school session?

a. Yes

b. No ( )

2. List down three domestic activities performed by girls

i. ----------

ii. ----------

iii. ----------

3. Does mentioned above domestic activities affect your studying?

a. Yes

b. No ( )

School Time Table and Girl students Performance in Science Subjects

1. Is there different time for arriving and leaving school between student girls and boys in school?

a. Yes

b. No ( )

2. Is there any challenges facing you in whole process of your studies at respected school?

a. Yes

b. No ( )

3. Is there remedial classes attended by science teachers to assist girls who miss the class session due to various reasons like biological factor for instance menstruation period other reason like coming away to school location?

a. Yes

b. No ( )

3. If the school time table does not allow science teachers to compensate in teaching student girls who are missing class session performance will be

a. Better

b. Poor ( )

4. Do science teachers involving you to learn science while he or she teaches in the classroom or the time of doing practical in laboratory?

a. Yes

b. No ( )

Thank you for your cooperation.

APPENDIX III

Questionnaire to District School Inspectors Officer

Dears District School Inspectors,

I am Mokami M. Chacha, a Master of Arts in Education student in the Faculty of social sciences, Mzumbe University. As part of the requirements for my degree programme, I am conducting a study on "**Views on the contribution of policy shift on performance of secondary girl students in science subjects".** I therefore kindly request you to help me in this study by completing this interview.

You are kindly requested to respond carefully to each question and give your response to the best of your knowledge. Your answers are highly confidential and any information gathered here will be used for research purposes only and not otherwise. Your participation is voluntary and you can stop at any time, though I will be grateful if you can complete Interview in full.

Age ----------Sex ----------Ward ----------Division ----------
Level of Education ----------Professional Qualification ---------- Experience year on the position ---------- Marital status --------- Sign of the Interviewee approval ---------- Date ----------

Time: ---------- hours

To what extent do you think policy shift (SEDP, BRNEd and FFE) contributes in improving academic performance of secondary school girl students in science subject such as physics, chemistry and biology?----------
---

2. What are the contribution of SEDP, BRNEd and Free Fee Education in improving academic performance of secondary schools girl students studying science subjects such as physics, chemistry and biology in selected secondary schools in Ileje District Council?----------

3. How do you assess trend of performance of secondary school girl students' studies science subjects such as physics, chemistry and biology in the period of implementation of SEDP, BRNEd and FFE from 2010 to 2017?

---

4. What challenges do you face in implementation of SEDP, BRNEd and Free Fee Education from 2010 to2017 in selected secondary schools such Ibaba, Lubanda, Nakalulu and Itumba in this district?----------

5. What are the strategies did you apply to address the above challenges in selected secondary schools in Ileje district council?----------

6. What are techniques being employed to ensure effectiveness of SEDP, BRNEd and Free Fee Education in academic performance of girl students in science subjects?----------

---

7. Basing on the inspection report do you think science teachers in Ileje were/are ready to implement SEDP, BRNed and FFE?----------

---

8. How many schools inspected from 2010 to 2017 in this district?

YEAR	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**TOTAL**
No. of Schools being Inspected										
TOTAL										

9. How do asses the trend of CSEE national results before and during the implementation of SEDP, BRNEd and Fee Free Education in academic performance of girl students in science subjects such physics, chemistry and Biology in selected secondary schools in Ileje?

---

10. Do you think is true to relay on policy contribution such as SEDP, BRNEd and Free Fee Education in academic performance of girl students in science subjects?

Thank you for your contribution.

APPENDIX IV

Interview to Academic Teachers

Dear, Academic Teachers

I am Mokami M. Chacha, a Master of Arts in Education student in the Faculty of social sciences, Mzumbe University. As part of the requirements for my degree programme, I am conducting a study on **"Views on the contribution of policy shift on performance of secondary girl students in science subjects".** I therefore kindly request you to help me in this study by completing this Interview.

You are kindly requested to respond carefully to each question and give your response to the best of your knowledge. Your answers are highly confidential and any information gathered here will be used for research purposes only and not otherwise. Your participation is voluntary and you can stop at any time, though I will be grateful if you can complete this Interview in full.

Form No ---------- Age --------- Sex ---------- Ward ---------- Experience years in this position ---------- Division ----------Marital status---------- Professional qualification ---------- Level of Education ---------- Signature of the respondent approval ---------- Date ----------

Time: ---------- hours

1. Do you understand the term policy shift in education particularly in public secondary school?
2. How do you assess performance of student girls CSEE from 2010 to 2017?
3. How do you compare performance of girl students before and during the implementation of SEDP, BRNEd and Free Fee Education?
4. Do you think SEDP, BRNEd and Fee Free Education policies have any contribution in performance of girl students in science subjects?
5. If question number (3) is yes or not then what is your argument to each of the three above policies?
6. To what extent do science teachers dedicated in implementing SEDP, BRNEd and Fee Free Education at this school?
7. How does school manage to buy relevant teaching and learning science facilities?

8. Is there any correlation between girls student's enrollment ratio and number of science teachers?

9. What are strategies applied to improve academic performance of girl students in science subjects in this school?

Thank you for your cooperation.

APPENDIX V

Interview to Head of School

Dears Head of School

I am Mokami M. Chacha, a Master of Arts in Education student in the Faculty of social sciences, Mzumbe University. As part of the requirements for my degree programme, I am conducting a study on "**Views on the contribution of policy shift on performance of secondary girl students in science subjects**". I therefore kindly request you to help me in this study by completing this Interview.

You are kindly requested to respond carefully to each question and give your response to the best of your knowledge. Your answers are highly confidential and any information gathered here will be used for research purposes only and not otherwise. Your participation is voluntary and you can stop at any time, though I will be grateful if you can complete the Interview in full.

Form No. -------- Name of School ---------- Ward ---------- Division ---------- Age ---------- Sex ---------- Marital status ---------- Academic qualification ---------- Professional qualification ---------- Signature of the respondent approval ----------Date ----------

Time: ---------- hours

1. How do you assess trend of performance of secondary school student girl's studies science subjects in the period of implementation of SEDP, BRNEd and Free Fee Education from 2010 to 2017?

GRADE	**YEAR**							
	2010	2011	2012	2013	2014	2015	2016	2017
A								
B								
C								
D								
F								

2. What mechanism do you applied to ensure performance of girls in science subjects during implementation of SEDP, BRNEd and Fee Free Education in this school?

3. Did you attend any training or seminar on, BRNEd and Fee Free Education?

4. Did you hold meeting to consult teachers some of important issues concern SEDP, BRNEd and Fee Free Education in improving academic performance of girl students in science subjects in this school?

5. What are the challenges hinder you during the implementation of SEDP, BRNEd and FFE?

6. Do you think SEDP, BRNEd and Fee Free Education policies have any contribution in academic performance of girl students in science subjects?

7. How do you assess the CSEE national results during the implementation of BRNEd and Fee Free Education academic performance of girl students in science subjects?

8. In your school do you have enough science teachers?

9. Do you think science teachers, academic teachers and parents in respective community agree with contributions brought by SEDP, BRN and Free Fee Education in improving academic performance of girl students in science subjects? Justify your answer.

10. Do you have relevant and adequate science facilities to support you in teaching science?

11. Does capitation grant enough to finance all school budgets?

12. If question number **11** is yes or not how school manage to buy relevant science teaching and learning materials like laboratory equipment such as chemicals and laboratory apparatus?

13. Does school environment support science teachers to teach science subjects?

14. What are perceptions of parents in Free Fee Education toward the provision of quality education to their children especially for girl students performance in science?

15. What kind of motivation does applied to encourage learning and teaching science subjects during implementation of, BRNEd and Fee Free Education?

16. Do you think is true to relay on policy contributions in academic performance of girl students in science subjects?

Thank you for your cooperation.

APPENDIX VI

Focus Group Discussion to Science Teachers

Dear science teachers,

I am Mokami M. Chacha, a Master of Arts in Education student in the Faculty of social sciences, Mzumbe University. As part of the requirements for my degree programme, I am conducting a study on "**Views on the contribution of policy shift on performance of secondary girl students in science subjects**". I therefore kindly request you to help me in this study by completing this Focus Group Discussion.

You are kindly requested to respond carefully to each question and give your response to the best of your knowledge. Your answers are highly confidential and any information gathered here will be used for research purposes only and not otherwise. Your participation is voluntary and you can stop at any time, though I will be grateful if you can complete the Focus Group Discussion in full.

Form No. ---------- Sex ---------- Age ---------- Marital status ---------- Name of your school ---------- Teaching experience in this school ---------- Subject that you teach ---------- Level of education ----------professional qualification ---------- Present grade level do you teach ----------Signature of the respondent approval ---------- Date ----------

Time: ---------- hours

1. How do you find teaching and learning in the school?
2. Are there relevant and adequate science facilities to support you in teaching science?
3. Does school environment support science teachers to teach science subjects?
4. What are challenges do you face in teaching science subjects?
5. What are mechanism do you applied to address above obstacles?
6. What are challenges hinder you in implementation of SEDP, BRNEd and Free Fee Education in this school?
7. Did you attend any training/seminar on how to implement, BRNEd and FFE in m improving academic performance of girl students in science subject?

8. What kind of methodology do you applied when you teach science subject in the class?

9. Do you receive update motivation from employer?

10. Science subjects involve theory and practice in teaching process do you have enough time to teach your girl students through practices?

Thank you very much for your cooperation.

APPENDIX VII

Questionnaire to District Secondary Education Officer (DSEO)

Dear District Secondary Education Officer,

I am Mokami M. Chacha, a Master of Arts in Education student in the Faculty of social sciences, Mzumbe University. As part of the requirements for my degree programme, I am conducting a study on "**Views on the contribution of policy shift on performance of secondary girl students in science subjects**". I therefore kindly request you to help me in this study by completing the Questionnaires.

You are kindly requested to respond carefully to each question and give your response to the best of your knowledge. Your answers are highly confidential and any information gathered here will be used for research purposes only and not otherwise. Your participation is voluntary and you can stop at any time, though I will be grateful if you can complete the Questionnaires in full.

Ward---------- Sex ---------- Age ----------Level of Education ---------- Professional Qualification ----------Experience year on the position ---------- Marital status ---------- Division ----------Sign of the interviewer approval ---------- Date ----------

Time: ---------- hours

1. Do you have any idea about SEDP, BRNEd and Fee Free Education in provision of quality education in this district? ----------

2. How do you assess performance of secondary school girls student's studies science subjects in the period of implementation of SEDP, BRNEd and FFE from 2010 to 2017?----------

3. Did you attend any seminar or training on how to implement SEDP, BRNEd and Free Fee Education?----------

4. To what extent SEDP, BRNEd and Free Fee Education enhance academic performance of girl students in science particularly in selected secondary schools include Itumba, Nakalulu, Ibaba and Lubanda?----------

5. What are techniques being employed to ensure effectiveness of SEDP, BRNEd and Free Fee Education in performance of girl students in science subjects?----------

---

6. What kind of motivation does applied to encourage learning and teaching science subjects during implementation of SEDP, BRNEd and FFE?----------

---

8. What do you comment about the trend of CSEE national results on performance of student girls in science subjects? ----------

---

9. How do you argue academic performance of girl students in science subjects before and during implementing SEDP, BRNEd and Free Fee Education?

---

10. What do you comment on contribution of SEDP, BRNEd, Fee Free Education in performance of girl students in science subjects? ----------

11. What are the challenges do you face in implementing SEDP, BRNEd and Free Fee Education in provision of quality education in this district?

---

12. What are the mechanism do you applied to address above challenges?

---

13. What are strategies do you applied to improve academic performance of girls in science subjects during implementation of SEDP, BRNEd and Free Fee Education in this school?

14. Does capitation grant is enough to finance all school budgets? Justify your answer----------

15. What are the perceptions of parents in the community toward implementing Free Fee Education in academic performance of girl students in science subject?

16. Is there any friendly environment to support teaching and learning science subjects in selected secondary schools such as Ibaba, Lubanda, Nakalulu and Itumba? ----------

17. Do you think is true to relay on policy contribution such as SEDP, BRNEd and Free Fee Education in academic performance of girl students in science subjects-----
---

Thank you very much for your contribution.

APPENDIX VIII

Interview to parents

Dear parents,

I am Mokami M. Chacha, a Master of Arts in Education student in the Faculty of social sciences, Mzumbe University. As part of the requirements for my degree programme, I am conducting a study on "**Views on the contribution of policy shift on performance of secondary girl students in science subjects**". I therefore kindly request you to help me in this study by completing this interview.

You are kindly requested to respond carefully to each question and give your response to the best of your knowledge. Your answers are highly confidential and any information gathered here will be used for research purposes only and not otherwise. Your participation is voluntary and you can stop at any time, though I will be grateful if you can complete this interview in full.

Form No ---------- Age --------- Sex ---------- Ward ---------- Experience years in this position ---------- Division ----------Marital status----------Work ---------- Level of Education ---------- Signature of the respondent approval ---------- Date ----------

1. Do you have any idea about Fee Free education?

2. Is there any kind of advantages obtained from Fee Free education policy to our children especial for academic performance of girl students studying science subjects?

3. What are the perceptions of parents towards the provision of free education in academic performance of girl students in science subjects?

4. Do you think is true to relay only on policy contribution example Fee Free Education in academic performance of girl students?

5. What kind of motivation do you apply to the girl students to ensure good academic performance in science subject?

6. Is there any friendly home environment to support your girl students to study science subjects after school session or during the holiday?

7. How do you see about the performance of girl students in science subjects?

8. What are the challenges facing the academic performance of student girls in science subjects?

9. What are the strategies used by parents to make sure that girls who studying science perform well in their subject?

10. Is there any cooperation between the parents and teachers in performance of girl students in science subjects in specific school?

11. Do you agree with the government plan to make sure that all the pupils who completed standard seven admitted to join with secondary school level?

12. Some time we found that most of form one girl students does not understand how to read and write even their name do you agree?

13. Do you have time to visit your children especially girl students in the area where they live?

14. How do you encourage your children especially girl students in studying science subjects?

Thank you very much for your contribution.