

A MIXED-METHODS INVESTIGATION ON GIRLS' ACADEMIC PERFORMANCE FROM THE NEW INVESTMENT POLICY PERSPECTIVE IN GOVERNMENT BOYS BOARDING FACILITIES SECONDARY SCHOOLS IN MALAWI

Submitted to Unicaf University in partial fulfillment of the requirements for the degree of

Doctor Of Education (Ed.D.)

By Lewis Simkoza

Approval of the Thesis

A MIXED-METHODS INVESTIGATION ON GIRLS' ACADEMIC PERFORMANCE FROM THE NEW INVESTMENT POLICY PERSPECTIVE IN GOVERNMENT BOYS BOARDING FACILITIES SECONDARY SCHOOLS IN MALAWI

	This Thesis by <u>Lewis Simkoza</u> has been approved by the committee, who recommend it be accepted by the faculty of Unicaf University in ent of requirements for the degree of	
[Doctor of Education (Ed.D.)	
-	Thesis Committee:	
[Dr Peter Mitchel, Supervisor	
[Dr Elena Papadopoulou, Chair	
[Dr Kadhila Ngepathimo, External examiner	
Γ	Dr Isaak Papadopoulos. Internal examiner	

Abstract

A MIXED-METHODS INVESTIGATION ON GIRLS' ACADEMIC PERFORMANCE FROM THE NEW INVESTMENT POLICY PERSPECTIVE IN GOVERNMENT BOYS BOARDING FACILITIES SECONDARY SCHOOLS IN MALAWI

Lewis Simkoza

Unical University

There seems to be a gap in the literature on girls' academic achievement whilst learning in boys boarding facilities secondary schools in Malawi. This paper addresses this issue by reviewing the Malawi School Certificate of Education examinations pass rate and the public University selection from 2010 to 2019 among girls selected in boys boarding facilities schools in Central West Education. The study was aligned to the current Education Strategy 2020 *learning for all* in contrast to *education for all*. Learning for all is about students acquiring knowledge and skills for their survival at work and in life. The action research case study wanted to establish whether girls boarding facilities needed to be provided in boys boarding facilities secondary schools.

This study adopted a multi-method approach utilizing formal interviews, official statistical records, focus group discussions, and questionnaires. There were 102 participants comprising female students, teachers, head teachers, and policy makers. Data were analyzed to map a broad trend in girls' achievements from 2010 to 2019 that were selected in boys boarding facilities schools.

The results of this study showed that 67.38 % of the girls enrolled in district boarding facilities schools passed the Malawi School Certificate of Education Examinations, compared to 60.4 % of the girls enrolled as day students in boys boarding

facilities schools. Further findings showed that district boarding schools had 11.3 % public university selection rate compared to 7.3 % for boys boarding facility schools. Participants identified school differentiation as the primary cause of the low MSCE examination pass rate and poor public university selection among girls in boys boarding facilities schools. The study contributes to discussions on how to consider and incorporate students' perspectives into developing practical applications to address academic gaps between girls in district boarding schools and girls in boys boarding facilities secondary schools.

According to the research, residential facilities for girls in schools with boarding facilities for boys are necessary for encouraging girls to invest more time and effort in their studies. Further studies are required to investigate additional educational outcomes, including employment and other areas of the students' lives, after they have gone through the two school systems.

Declaration

I declare that this thesis has been composed solely by myself and that it has not been submitted in whole or in part, in any previous application for a degree. Except where states otherwise by reference or acknowledgment, the work presented is entirely my own.

Copyright page

I confirm that I retain the intellectual property and copyright of the thesis submitted.

I also allow Unicaf University to produce and disseminate the contributions of the thesis in all media forms known to come per the Creative Commons BY Licence (CCBY)

Dedication

I dedicate this paper to All Mighty God

Acknowledgments

First, I would like to extend my gratitude to the people that inspired me to write about this captivating and intriguing topic. Prof. Bob Kuthemba Mwale, to whom I have the pleasure to introduce him as my mentor from undergraduate, graduate, and post-graduate school. He inspired me to embark on such an academic journey. Next, I would like to thank Dr. Martha Kamwendo and Dr. Peter Mitchell for taking me through this academic journey; without their support and guidance, I quit. I would also like to thank my friends and family for all the assistance throughout the past years that I worked on this manuscript. My parents were by my side throughout this whole process and they never gave up hope that I would someday finish this thesis. I also had the support of my wonderful friend Dr. Gerald Chigona who helped me edit and revise the manuscript. Thank you, my dearest wife Irene and our lovely children, for your support and assistance. To the departed Addison Senior and Addison Junior, you would have equally shared your joy with me and the rest of the family members. Rest in peace till we meet again on that glorious day.

Table of contents

Approval of the Thesis	ii
Abstract	iii
Declaration	v
Copyright page	vi
Dedication	vii
Acknowledgments	viii
Table of contents	ix
List of abbreviations	xvi
List of Tables	xviii
List of Figures	xx
CHAPTER 1: INTRODUCTION	21
Statement of the problem	27
Purpose of the Study, Research Aims, and Objective	29
Nature and Significance Of The Study	30
Research Questions and Hypothesis	34
Summary	36
CHAPTER 2: LITERATURE	37
Theoretical Framework	38
At-Risk Learners	47

Educational investments	63
Education as a tool for political campaigning	77
System of Public Secondary School	92
The Factory Model of Education	106
Girls Access to Secondary School Education	111
Understanding Inclusive Education in The Context of Girl's Education	125
Summary	139
CHAPTER 3: RESEARCH METHOD	143
Research Approach and Design	148
Research Design	149
Research Approach	151
Research Strategy	152
Population and Sample of the Research Study	158
Sample Size	160
Sampling Techniques	161
Materials/Instrumentation of Research Tools	163
Questionnaires	163
Students' Questionnaires	164
Focus Group Discussions	166
Interviews	168

Records	172
Operational Definitions of Variables	173
Academic Achievement	173
Teachers' Qualification	175
Boarding Facilities	178
Female Education	180
MSCE Pass Rate	181
Public University Selection	182
School Model	182
Study Procedures and Ethical Assurances	183
Ethical Assurances	185
Data Collection and Analysis	191
Inductive Data Analysis	192
Statistical Analysis	193
Data Triangulation	193
Collection of Qualitative Data	194
Collection of Quantitative Data	195
Content Analysis	195
Summary	196
CHAPTER 4: FINDINGS	201

Trustworthiness of Data	206
Credibility	207
Transferability	209
Dependability	211
Confirmability	212
Reliability and Validity of Data	213
Results	217
Demographic Data	217
Response Rate	228
Response Rate for the Interviews with Policy Makers	229
Response Rate for the Interviews with the Girls	230
Response Rate Focus Group Discussion with Girls	231
Response rate self-completing questionnaires with teachers	232
Response Rate Self-Completing Questionnaires with Head Teachers	233
Research Question One	234
Hohypothesis	237
Hahypothesis	237
Hohypothesis	239
Hahypothesis	240
T-Test of Public University Selection Rate	240

Research Question Two	241
Teachers' educational qualifications	242
Hohypothesis	242
Hahypothesis	242
Teachers' years of teaching in the profession	244
Hohypothesis	245
Hahypothesis	245
T- Test on Teachers' Years of Experience	245
Hohypothesis	247
Hahypothesis	247
Research Question Three	258
Evaluation of the Findings	262
CHAPTER 5: IMPLICATIONS, RECOMMENDATIONS AND CONCLUSIONS	283
Implications	287
Recommendations for application	297
Recommendations for future research	313
Conclusion	322
Examining the Academic Performance Difference between the Girls in the Sci	hool
Models	324

Explaining Factors Contributing to the Differences in the Achievement o	f Girls in
Boys Boarding Facilities Secondary School	325
The Third Objective Was To Investigate The Role Played By The Ministry	/ Of
Education Science And Technology In Improving The Quality Of Second	lary
School Education Among Girls In District Boarding Schools	327
REFERENCES	331
APPENDICES	387
Appendix A	387
Appendix B	388
NON-COMPLETED INFORMED CONSENT FORM	388
Appendix C	394
Appendix D	395
QUESTIONNAIRE FOR HEAD TEACHER	395
Appendix E	399
QUESTIONNAIRE TO TEACHER	399
Appendix F	402
INTERVIEW SCHEDULE TO MINISTRY OFFICIAL	402
Appendix G	404
Appendix H	406
QUESTIONNAIRE FOR FEMALE STUDENTS	406

Appendix I	. 410
MINI FOCUS GROUP DISCUSSION QUESTIONS TO THE STUDENTS	. 410
Appendix J	. 412
TELEPHONE INTERVIEW QUESTIONS TO FEMALE STUDENTS	. 412

List of abbreviations

CA : Capability approach

CAMFED : Campaign for Female Education

CCDS : Community Day Secondary School

CEPS : China Education Panel Survey

CSS : Conventional Secondary Schools

DEC : Distance Educations Centers

DPP : Democratic Progressive Party

EMIS : Education Management Information System

ESA : Education Sector Analysis

FPE : Free Primary Education

FSSE : Free Secondary School Education

HTC : Human Capital Theory

KCSE : Kenyan Certificate School Examination

KCSE : Kenyan Certificate School Examinations

LUANAR : Lilongwe University of Agriculture and Natural Resources

MESA : Malawi Education Sector Analysis

MoEST : Ministry of Education Science and Technology

MOOC : Massive Open Online Courses

MSCE : Malawi School Certificate Examinations

MUST : Malawi University of Science and Technology

MZUNI : Mzuzu University

NCHE : National Council for Higher Education

NESIP : National Education Sector Investment Plan

NSCR : National Survey Research Center at Renmin University of

China

NSIE : National Strategy on Inclusive Education

ODSS : Open Day Secondary Schools

OER : Open Education Resources

ORT : Other related transactions

PPP : Public-Private Partnership

PSIP : Primary School Improvement Program

PSLCE : Primary School Leaving Certificate Examinations

PTA : Parents Teachers' Organization

RD : Research and Development

SDGs : Sustainable Development Goals

CSE : Child Sexual Exploitation

SIT : Self Identity Theory

UNCF : United Nations Children Fund

UNESCO : United Nations Education and Scientific Organization

UNICEF: United Nations International Children Education Fund

WHO : World Health Organization

List of Tables

Table 3. 1 Shows the Breakdown of Respondents Scheduled to Complete	
Questionnaire	166
Table 3. 2 The Number of Respondents Scheduled for Focus Group Discussions	168
Table 3. 3 Sample Anti-Deficit Questions	170
Table 3. 4 Number of Respondents That Were Scheduled For Interviews	170
Table 4. 1 Summary Table Linking the Premises to Each Research Question	204
Table 4. 2 Head Teachers' Gender	218
Table 4. 3 Policy Makers' Gender	218
Table 4. 4 Teachers' Gender	219
Table 4. 5 Teacher Specialization	219
Table 4. 6 Specialist Teachers	220
Table 4. 7 Teachers' Educational Qualification in District Boarding Schools	220
Table 4. 8 Teachers' Educational Qualification in Boys Boarding Facilities Schools	. 221
Table 4. 9 Years of Teaching Experience (District Boarding Schools)	221
Table 4. 10 Years of Teaching Experience (Boys Boarding Facilities Schools)	222
Table 4. 11 Years Taught At the Current Station (District Boarding Schools)	222
Table 4. 12 Years Taught At Current School (Boys Boarding Facilities Schools)	223
Table 4. 13 Response Rate for Policy Makers	230
Table 4. 14 Response Rate for Girls' Interviews	230
Table 4. 15 Response Rate for Girls' Focus Group	231
Table 4. 16 Response Rate Self-Completing Questionnaires with Girls	232
Table 4. 17 Response Rate for Teachers' Questionnaire	233

Table 4. 18 Response for Self-Completing Questionnaire to Head Teachers	34
Table 4. 19 Girls' Pass Rate in the Two Sampled District Boarding Schools 2	35
Table 4. 20 Girls' Examination Pass Rate in the Two Sampled Boys Boarding Facilities	;
Schools	36
Table 4. 21 T-Test MSCE Pass Rate between the two school models	37
Table 4. 22 Girls' Public University Selection Rate from District Boarding Schools 2	38
Table 4. 23 Students' Status on Public University Selection from 2010-2019 In Boys	
Boarding Facilities Schools	39
Table 4. 24 T-Test of Public University Selection Rate	40
Table 4. 25 Teachers' Educational Qualification in District Boarding Schools 24	41
Table 4. 26 Teachers' Educational Qualification in Boys Boarding Facilities Schools. 24	12
Table 4. 27 T-Test on Educational Qualification2	42
Table 4. 28 Years of Teaching Experience (District Boarding Schools)2	44
Table 4. 29 Years of Teaching Experience (Boys Boarding Facilities Schools) 24	44
Table 4. 30 T- Test on Teachers' Years of Experience2	45
Table 4. 31 Years Taught At the Current Station (District Boarding Schools) 24	46
Table 4. 32 Years Taught At Current School (Boys Boarding Facilities Schools) 24	46
Table 4. 33 T-Test on Number of Years at the Current School2	48
Table 4. 34 Key Challenges and Expectations from the Educational Plans2	50
Table 4. 35 Teachers' Gender2	59
Table 4. 36 Teacher Specialization per School Category	59

List of Figures

Figure 2. 1 Conceptual Framework	42
Figure 4. 1 An Abandoned Broken Down Bore-Hole in One of the Boys Boarding	
Facilities Schools	225
Figure 4. 2 A Pit Latrine for the Girls at One of the Boys Boarding Facilities School 2	227
Figure 4. 3 Educational Plans	249
Figure 4. 4 Distance to Boys Boarding Facilities Schools	251
Figure 4. 5 Infrastructures Distribution in the Schools	252
Figure 4. 6 Willingness to Transfer to District Boarding Facilities Schools	253
Figure 4. 7 Learners' Views on Academic Improvement in the Schools	254
Figure 4. 8 Teachers' Views on Learners' Improvement in the Schools	255
Figure 4. 9 Diagrammatic Presentation of Participants' Responses	256

CHAPTER 1: INTRODUCTION

According to the Malawi Education Sector Analysis (MoEST, 2019, p. 77) efforts to increase girls' secondary school access at the entry-level and retain them in the education system have worked across the nation. It is worth noting that some of the interventions to increase access and retention of the girls include affirmative action on girls' education such as the new investment policy, the 50-50 selection criteria in secondary, construction of girls' hostels, girl-friendly infrastructure, provision of bursaries, role models for girls and provision of school health, nutrition, physical education, and sports as well as psychosocial support provided to them. Along with these actions, the administration reinstated the Junior Certificate Examinations, which it had previously abolished in 2016. This has given students the chance to be evaluated as they get ready for the Malawi School Certificate of Education examinations. The government also got rid of the guota system for selecting students for public universities and secondary schools. Students are selected for admission to these institutions based on merit. The development of new schools, the growth of already-existing secondary schools, the modernization of Community Day Secondary Schools, and the expansion of Open Secondary Schools all contribute to the continued success of the secondary education sector.

Nonetheless, a low transition rate from primary to secondary school, which has remained at 38% over the years, is one of the important factors that characterizes the subsector (MoEST, 2019, p. 52). A lack of additional form one places in boarding schools proportional to the number of girls has resulted in a low secondary school enrollment

rate. Instead, the majority of learners attend community day secondary schools. Without losing focus on the need for the realization of the global Sustainable Development Goals (SDGs), Malawi has scaled up girls' access to secondary school education. The secondary school sector, through the National Education Sector Investment Plan (NESIP) 2020-2030 has set ambitious plans that are expected to bring forth the much-needed results in the education system. Although the Ministry of Education seems to have been registering significant improvement in enrollment across the subsector, some critics have argued about poor academic results, especially among females. By focusing on girls' academic achievement during Malawi School Certificate of Education and Public University Selection, this research examines the implementation of the new investment policy in Malawi secondary schools in boys boarding facilities secondary schools. Researchers found that proper school facilities create a conducive environment for successful teaching and learning (Baafi, 2020), despite the fact that Malawi's new investment policy may have opened up educational chances for many girls in boys boarding facilities schools that do not have conducive environment. For instance, some secondary schools were just converted from the previous Distance Education Centers (DEC) and yet some were built by communities on a self-help basis to provide education for their wards. Such a type of learning environment appears to fall short of the standard requirement. Most rural secondary schools constructed by communities, do not have adequate teaching and learning facilities, water and sanitation facilities, electricity, lodge, and boarding facilities among others. In Malawi, boys boarding facilities secondary schools are secondary schools that do not have girls boarding facilities apart

from those improvised by communities, and girls are selected into these schools as day scholars. This is a policy that was developed in the early 1990s and came to full operation mid-1990s.

The Directorate of Secondary and Distance Education in the Ministry of Education, in Malawi, is mandated to prepare secondary school learners for formal and informal services and advancement in post-secondary school studies. Sadly, there are issues with girls receiving low-quality education in Malawi, as seen by the declining pass rate for the Malawi School Certificate Examinations and low enrollment in public universities. But since the start in 1990s, more girls have been attending secondary school education, which has presented some difficulties. The government was required to progressively adjust the educational system to conform to the superiority standards of boys, preparing girls for the same examinations and providing equal possibilities for girls to pursue higher education. There have been numerous studies on the poor academic performance of secondary students, but none have examined the academic performance of girls in boys boarding facilities secondary schools. In essence. traditional elements other than legal frameworks appear to be the subject majority of Malawian investigations. It is hardly surprising at this point that practically all national educational institutions now consider educational policy to be a significant research subject (Fan & Popkewitz, 2020, p. 11). Development and implementation of educational policies are therefore necessary for both problem-solving and ensuring that people who implement policies embrace the policy directions (Bagley, Lumby, Hamilton, Roberts, Ward & Woods, 2016). These are equally significant elements

that support the education of girls. In light of this, we may now analyze the opportunities that follow from applying the Anti-Deficit Achievement (AD-A) model. Hence, we note the importance of moving away from blaming the learners, to providing solutions to the problem that learners face. Malawi's effort to promote girls' achievement in schools, is envisaged in Malawi's National Girls' Education Strategy (NGES), in a vision titled "All girls in Malawi access, participate in, compete and excel at all levels of education that empowers them to effectively contribute to the country's sustainable social, economic development by the year 2018" (MoEST, 2014, p 9). In essence, the policy strives to improve girls' educational opportunities and address the disparities between boys and girls in terms of participation in and access to school. The Ministry of Education provides technical guidance to Malawi's stakeholder with the goal of increasing the number of girls enrolled in school and developing conducive learning conditions for their academic success (Cassity, Kunkwenzu & Robertson, 2017).

Literature shows that despite nations making Education for All a national as well as an international priority for the African child, Roche (2016, p. 1) noted that "the Education for All remains elusive". Roche said that despite this, people still believe that education is more important in putting an end to the social, economic, and political wrongdoings that plague humanity. From this perspective, it became vital for each nation to remove any obstacles preventing the delivery of high-quality education to its youth. Increasing girls' access to secondary education was one method of decreasing barriers. Due to this, Malawi determined under the new investment policy which secondary schools' girls would attend as day scholars. As a result, form one girls were once again

selected to attend boys' residential schools as day students by the Ministry of Education.

In Malawi, secondary education is typically delivered through boarding schools, where students are given housing to live in dorms on the school site during the academic year, and day secondary schools, where students do not reside on the school campus. Boarding schools are either full boarding or a mixture of both boarders and day students as the case is in boys boarding facilities schools. It might be claimed, though, that secondary school variations based on whether a school is a day school or boarding school influence gender collections in a community and frequently lead to gender inequality. According to Akyeampong, Chimombo, Lewin Marcos, and Mindano (2018), the Ministry of Education Science and Technology classified public secondary schools as Community Day Secondary Schools (CDSS), Open Day Secondary Schools (ODSS), and Conventional Secondary Schools (CSS), which also include boarding schools. The boarding secondary schools are further classified as either full boarding facilities (+++) or boys boarding facilities (++) secondary schools. The schools have further been differentiated as single-sex national schools (for boys or girls) and as co-education schools (either boarding or day schools). These further increase secondary school facilities disparities, making boarding schools more prestigious than day secondary schools. With this observation, the wish from parents "is that their child has educational opportunities and access on par with other students in school" (Burns, Kennett, Martin, Munro-Smith & Pearson, 2021, p. 15)

After gaining independence in 1964, the government had only four government national boarding secondary schools which are Lilongwe Girls Secondary School, Mzuzu Government Secondary School, Blantyre Secondary School, and Dedza Secondary School. The rest were district secondary schools with either full boarding facilities or with only boys boarding facilities. There is a vast body of literature from Papworth (2014) and other researchers that debates the merits of boarding secondary schools but the current research relates to girls that are selected as day scholars in boys boarding facilities secondary schools. Even though Gibson (2016, p.16) wrote that "boarding schools were sickening" the results of attending boarding school have been fruitful. This fact is backed by Behaghel, Chaisemartin, and Marc Gurgand (2017, p. 1) that "there is a long-standing tradition in American and English upper-class families of sending male children to elite boarding schools even at a very young age". Rogerson (2015) as cited in Sikhwari et al. (2020) notes that "students in a boarding school get guick attention from school counselors, teachers, and fellow students (p. 2). It is a motivating factor for the learners. Nevertheless, the government still decided to build new day secondary schools in the most populous places across all the districts of the country as a way of increasing learners' access to secondary school education. The intention was to allow some learners to live with relations and friends because the schools did not have boarding facilities. The policy's objective was to keep boarding secondary school places to a minimum and day secondary school places to a maximum. The government planned to gradually phase out the need for boarding schools by constructing day secondary schools close to the people and using local catchment selection of learners

in day secondary schools. However, the government was flexible to allow day secondary schools that needed boarding systems to operate boarding and that parents were to bear the full costs. In addition, the government's intention at the beginning of the project was to provide equal and comparable learning opportunities in both day and boarding schools; a fact that some quarters feel that secondary school differentiation has led to unequal and incomparable secondary school education.

No sooner than later did the new day secondary schools find themselves lacking boarding facilities because some learners came from distant places and needed accommodation. It was a common understanding that government would not rescind policy implementation but had to allow communities even with less and minimal skills and expertise to add school infrastructures such as teachers' houses, hostels, and classroom blocks. Most of the day secondary schools started with forms one and two and later graduated into forms three and four. Girls attended forms one and two and upon completing form two, they were transferred to other boarding facilities schools to start form three. By 1979, most of these day secondary schools had all girls transferred into other boarding facilities schools, and no more selection of girls was done up until early 1990.

Statement of the problem

The question of whether girls boarding facilities should be provided in boys boarding facilities secondary schools or not has been debated by the government, educationists, and Parents. Girls' access to education in sub-Saharan Africa is hampered by among others preference to boys than girls (Lewin, 2009, p. 116). In addition, most

governments have limited funding making it difficult to build more boarding schools. Consequently, maintaining the current boarding schools has also become a great challenge. Noting that there are few boarding places for girls, Mapesela (2012, p. 91) argues that despite national and international conventions to eradicate inequalities, gender inequalities continue to exist in most parts of the world. The absence of girls boarding facilities in boys boarding facilities schools seems to suggest that girls are still being marginalized in our society. The problem with marginalizing girls in Malawi is that; girls get poor grades. This is supported by evidence that boys have consistently outperformed girls on all national examinations (Robertson et al., 2017). Contrary, some studies in other countries have shown that girls outperform boys (Ullah & Ullah, 2019). For instance, in Japan, France, and Kenya, girls are reported to have been outclassing boys (MacLeod, 2018 & Morita et al., 2016). It is of great concern that there are few girls' boarding facilities and that many girls fail final secondary school national examination. It is further argued that completing secondary school is inadequate if girls fail to acquire quality education with transferable skills, such as critical thinking, problem-solving and digital skills. These are necessary for future employability, yet too many education systems worldwide fail to deliver a quality education that supports girls in their transition from school to work (United Nations Children's Fund, 2020).

Poor grades at Malawi School Certificate of Education imply that girls gain insufficient skills and knowledge. According to Dhungana (2020) girls and women that lack the necessary skills and knowledge fail to rise above societal oppressions and continue living below their standards. In addition, the girls find it hard to enter university

and other institutions of higher learning. Furthermore, the girls cannot easily get employment because they have not obtained the required certification which is the Malawi School Certificate of Education. According to the Malawi Economic Monitor (2018), a high failure rate among girls has increased school dropout and child marriages resulting in increased population growth due to early childbearing.

Purpose of the Study, Research Aims, and Objective

The purpose of this educational research is to engage in disciplined inquiry to generate knowledge on a topic significant to learners, teachers, administrators, schools, and other educational stakeholders. There have been reports suggesting that low achievement levels in most developing countries are due to the marginalization of girls which has resulted in reduced learning opportunities between boys and girls (World Bank, 2018). This research study aims at examining whether girls boarding facilities need to be provided in boys boarding facilities by considering if there are any academic performance gaps between girls in boys boarding facilities secondary and girls in a district boarding facilities school. The objectives of this study are to understand the similarities and differences in what has value in boys boarding facilities secondary school and district boarding facilities school by teachers, educational leaders, and learners. The study further looks at the extent to which boarding facilities add value to the learning environment for the success of the learners. In this study, I argue that better solutions to improving girls' education can be found by using the Anti-Deficit Achievement Framework

unlike the use of the Deficit Achievement Framework which seems to have dragged the rate of improving girls' secondary school education.

Nature and Significance Of The Study

The absence of academic research demonstrating the effect of some of the educational policies on academic achievement in boys boarding facilities schools presents a barrier for the processes of educational policy implementation in secondary schools in Malawi. Numerous studies that have been conducted do not evaluate the academic achievement of girls in schools with boys' residential facilities. The dearth of empirical research that has looked at the issue of girls' performance in Malawi School Certificate of Education examinations and the selection rate for the public universities justifies the need for this investigation. There is still much to be learned, even while some studies have shown promising outcomes like improved students behavior, higher confidence levels, and higher scores in several secondary schools (Achiaa, Asomoah, Ofori, & Tordxro, 2021). There is also a lack of information regarding the traits of girls and the proportion of boys attending schools who pass their examinations and are admitted to public colleges. Government and non-governmental organizations can use the data to develop strategies that will increase the success of the girls. It will also make a major and pertinent contribution to the corpus of the research already done on the academic performance of girls in secondary schools to examine the new investment program and the relative effects it has on its participants.

The current study is significant in meeting the goals of the 2030 Education Framework for Action, which focuses on promoting education for excluded and marginalized groups (UNESCO, 2017). Girls and women, for example, have traditionally been excluded from educational opportunities. The goal for this study is to give alternative educational policy directions from an account of what affects girls' education in boys boarding facilities secondary schools. So far, no other research has investigated girls' academic achievement in boys boarding facilities schools in Malawi bordering on infrastructure's influence. It is for this reason that a research study is undertaken to provide educational stakeholders data through which informed decisions that ultimately affect the quality of schooling for the learners could be made. This thesis contends that the new investment policy has a legal framework that underpins girls from boys boarding facilities to a challenging learning environment. I, therefore, apply theories and approaches that seek to situate a girl child in boys boarding facilities schools with self-determined positions. The study focused on the number of girls that are selected into boys boarding facilities secondary schools as a critical factor in determining whether there are any added values in boys boarding facilities school.

In the current study, a mixed research method was adopted aligning with an action research case study. It is important at this moment to consider an action research study as a process of gathering evidence to implement change in educational practices (Hensen, 1996). Through the use of action research, Yin (2014) noted that multiple data collection techniques, such as interviews, focus group discussion, document

analysis, and surveys would be employed to answer the important why and how research questions.

For this study, a list of the targeted population was made available from which purposive and convenience sampling were applied. Cohen, Manion and Morrison (2007, p 115) described the purposive method as "a sample that is satisfactory to the specific needs of the researcher". For instance, a form four class was selected alongside subject teachers, head teachers, and policy makers based on their knowledge and expertise regarding the research topic. This was a sample comprising four head teachers, 24 subject teachers, 72 female students in form four, and two ministry officials, making a total of 102 participants. Morrison and Stone (1998) proposed the use purposive sampling to get a fair representation of the whole population because not everyone in the population can take part in the study.

The purpose of using multiple data collection techniques in the study was to ensure that data were collected, analyzed, and interpreted objectively to promote integrity and public trust (Marshall & Rossman, 1999). Merriam (1998) noted that qualitative data can best be gathered from interviews. Therefore, the researcher conducted interviews with Ministry of Education officials and some learners. Through interviews, it was possible to establish themes and patterns relating to girls' performance at Malawi School Certificate of Education. From research questionnaires, respondents described the values of boys boarding facilities school, the achievements and school experiences of girls in their conversant language. This provided both qualitative and

quantitative data. After that, data was triangulated to increase the validity of the issue being investigated (Denzin, 1978; Patton, 2002).

In addition, Yin (1994) hailed the use of multiple sources of evidence in case studies. Furthermore, triangulation involves the use of archival records which are often used in longitudinal research studies to generate new theories. In addition, Coe, Ashley, Hedges and Warring (2017) recommended the use of documentaries such as personal records, public records and archival records which are readily available in the field of education to be examined and analyzed in the topic related to the one under study.

According to Baafi (2020) boarding school facilities offer more academic prospects and outcomes that may not be comparable to day school facilities. In support of this, Valentino (2012) argued that learners in boarding schools are more advanced in their academic and social circles. In a boarding school, learners easily come together to form academic groups with their peers which eventually bear positive impacts on learners' academic outcomes (Burns, Kennett, Martins, Pearson & Smith, 2016).

The study is significant based on the hypothesis that "Human capital analysis assumes that education raises earnings and productivity primarily by producing knowledge, skills, and a way of analyzing problems" (Becker, 1993, p. 19). According to Baafi (2020, p. 121), boarding schools provide a distinctive learning environment for obtaining a high-quality secondary education. As a result, the quality and kind of the facilities at the school can have a big impact on how well students learn. It is predicted that the government and policymakers would firmly adopt not only the anti-deficit

accomplishment model but also innovative education model as opposed to the current factory education model.

This field of academic study is more often researched. However, there has never been a conclusive result on girls' academic performance that may benchmark appropriate practices for the girl child's education in secondary schools. This is more reason for continuous search in this field. The findings of this study are expected to support the idea that, boarding schools are the foremost educational opportunities for a lot of students in the Malawi setting because boarding schools provide academic superiority as well as personal growth (Burns, et al. 2010).

Research Questions and Hypothesis

The main question set to be answered was whether girls boarding facilities should be provided in boys boarding facilities schools or not. This was the question that guided the choice of methodology and analysis of data. However, with more insights whilst doing the research, some more research questions have been identified which need further investigation. The following questions formed subordinate research questions for investigation.

- Q1. How do girls in boys boarding facilities schools perform during Malawi School Certificate of Education examination and public university selection when compared to girls in district boarding schools?
- **Q2.** What are the factors contributing to low academic performance among girls in boys boarding facilities schools?

Q3. To what extent does the Ministry of Education manage girls that are selected for boys boarding secondary schools in the context of the new investment policy?

The research seeks to cover the following objectives

- a. To examine the academic performance difference between the girls in the school models.
- b. To explain factors contributing to the differences in the achievement of girls in boys boarding facilities secondary school.
- c. To investigate the role played by the Ministry of Education Science and Technology in improving the quality of secondary school education among girls in district boarding schools.

The available hypotheses were aligned with the sub-research question one to determine levels of achievement in the two school models. A hypothesis is a statement that can be proved or disproved. A research question was made into a hypothesis by changing it into a statement.

H1o....null hypothesis

There is no academic achievement difference between girls selected in boys boarding facilities schools and the girls selected in district boarding schools.

H1a.....alternative hypothesis

There is academic achievement difference between girls selected in boys boarding facilities schools and the girls selected in district boarding schools.

H1o....null hypothesis

Teachers in boys boarding facilities schools do not hold the same teaching experience as teachers in district boarding facilities schools.

H1a....hypothesis

Teachers in boys boarding facilities schools hold the same teaching experiences as teachers in district boarding schools.

H1o....null hypothesis

Teachers in boys boarding facilities schools do not have the same educational qualifications as teachers in district boarding schools.

H1a...hypothesis

Teachers in boys boarding facilities schools hold the same educational qualifications as teachers in district boarding school.

Summary

Chapter one introduces the study that girls are usually marginalized by contending that girls' boarding facilities offer more academic prospects and outcomes that may not be comparable today school facilities. The main question set to be answered is whether girls boarding facilities should be provided in boys boarding facilities schools in order to improve girls' academic performance utilizing a mixed research method.

CHAPTER 2: LITERATURE

As mentioned in the introduction, the study examines the government's investment in girls' secondary school education and the connection between that expenditure and academic success. The literature study looks at and evaluates both arguments in favour of and against the need for boarding facilities for Malawian girls enrolled in secondary schools with boarding facilities for boys. The academic performance of girls in secondary schools with boy residential facilities is currently unknown because to the delayed development of secondary schools and the dearth of research and evidence-based policy formulation. The purpose of the study is to determine whether secondary schools that board boys must provide residential facilities for female students as well. Four secondary schools in the Central West Education Division participated in the study.

This chapter discusses thelow academic performance of girls on national exams as a cause for worry among parents and the government. As a result, it implies that the previously described contemporary educational system is flawed through its practice and policy that plays a key role in maintaining the inequality status quo. It is for this reason that the study considers issues of access, equity, and quality of secondary school education among girls as critical issues in educational policy and thus forms an integral part of policy and transformation debates and discussions. The first part of the review looks at girls as at-risk learners and is immediately followed by types of educational investments, how education is viewed as a political campaign tool. This is followed by looking at systems of public secondary schools. Last but not least, the review

considers how girls' admission is accelerated by among other issues looking at girls' education as inclusive.

Throughout the study period, an exploratory investigation of the Unicaf- E-Library and public libraries was done to discover literature that was relevant and appropriate for this study. ProQuest, Academic Search Complete, Jostor, Google Scholar, Education Research Complete, Psychology, and E-Library were among the databases used. The most recent papers from relevant seminal peer-reviewed articles and scholarly textbook citations dated no later than 2016 were used in the literature review.

The goal of this literature study was to identify hurdles to girls' academic accomplishment, facilitating variables for girls' achievement, and processes in girls' secondary school admissions.

Keywords: Academic achievement, boarding schools, MSCE pass rate, and public university selection are some of the key search terms.

Theoretical Framework

The requirement for female boarding facilities in secondary schools with males boarding facilities is covered in this section as a mitigating factor to girls' underperformance in national examinations. The study is about the experiences and effects of the girls as reported by the participants in boys boarding secondary schools. The framework focuses on the investment in girls' boarding schools by endorsing the notion that educational investment levels are an important element in determining how well females achieve academically in schools with boys boarding facilities. According to Creswell and Poth (2018 p.7) "theoretical frameworks are a unique way of abstractly

thinking about or looking at the world". The theoretical framework is important in this action case study because it links the many research components and helps us comprehend the goals and objectives of the investigation. Therefore, the theoretical frameworks served to essentially define the research problem and aided in the selection of the study pertinent questions. The theories discussed at the beginning of this section and the available literature were carefully consulted while choosing the theoretical framework for this investigation. In order to advance the requirements of underrepresented groups of people, the study used the human capital paradigm, which is the prominent one in the economics of education. Through the promotion of effective and efficient female secondary school education while paying close attention to women's values, this study seeks to raise awareness of the significance of women's human capital investment and provide a foundation for removing obstacles to increasing female human capital investment in all schools with boys boarding facilities. The study has focused on females who attend schools with boys' residential facilities where there are no residential facilities for girls. The knowledge that human capital refers to a person's abilities and knowledge to perform their duties more effectively also had an impact on the theory's selection. The capability approach and the anti-deficit model serve as the foundation for the theoretical framework of this study's human capital. According to Guan (2019) the majority of internal research findings indicate that results of human capital research for female groups are uncommon. Most findings unambiguously demonstrate that female human capital performs relatively worse than male human capital in terms of countries' economic growth. The study was able to pinpoint some of the important indicators of education, including

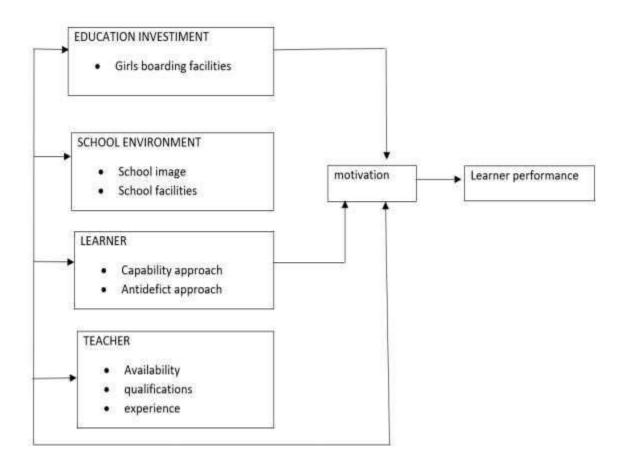
the quality and quantity of teachers, the proportion of girls enrolled in school, and the results of national exams used to gauge human capital. However, some authors contend that using national test scores to gauge human capital is not only the best and most ideal way, but also one that faces numerous challenges in actual implementation. As a result, some researchers determine the overall human capital stock of the year by computing the average number of years of education. This strategy has been dubbed simple, straightforward, and widely usable in practice by some. With the help of this crucial information, the researcher believes that the results will demonstrate the need for the government to support gender equality in secondary school investments. The data in Guan's paper (2019) showed a discrepancy between the number of employed men and women; this discrepancy was evidence of gender discrimination in social employment in China's Guangdong Province. In a similar vein, the results of this research investigation should demonstrate the academic disparity between different investment levels in the schools. This context served as the foundation for the researcher's assumption that there may be both internal and external factors influencing girls' academic performance in secondary schools with boys boarding facilities based on the human capital theory, social identity theory, capability approach, and anti-deficit model. This combination is a key component of the study because it disrupts the educational disparities that affect girls' access to secondary education at boys' boarding institutions. The human capital theory is consequently examined and commented on from a gendered viewpoint after noting that there is an intentional concentration on girls in boys boarding institutions. It is common for schools to provide information to students about their academic achievement, but it is

unclear how this data affects decisions regarding future educational investments. On these national examinations, students are given a label and a score that represent their overall achievement. These results are crucial for comprehending investments decisions in education and the effects of governmental policy actions (Murnane, Papay, Richard & Willett, 2016)

Girls could, for instance, ascribe their academic success to the extent of educational expenditure in boarding schools for boys as an external cause. As internal determinants, the girls may also credit their academic success to their levels of motivation, which may be influenced by the school's environment, the availability of resources, the characteristics of their teachers, and their attitudes regarding boys boarding facilities schools (Atieno, Omolo & Otara, 2020). More research findings on the conditions of girls' schooling in Malawi paint a bleak picture of the poor-quality secondary school education and the rare opportunities it offers for progression. Using the external and the internal factors, a conceptual framework was developed. Shikalepo (2020) defined a conceptual framework a relationship that depicts the key concepts that define the focus and direction for the study. These relationships are illustrated in Figure 1.

Figure 2.1

Figure 2. 1 Conceptual Framework



Source 2022, L. Simkoza (in progress)

The wide meaning of educational inequality has been defined using this conceptual framework as referring to a systematic disparity in who has access to educational resources depending on their background and characteristics.

Literature shows that Bucker (1964) was one of the pioneers in the development of the human capital theory and stated that this human capital can be accumulated in

different forms of education. Thus, education levels keep on increasing from primary, secondary and tertiary. Grant (2017) acknowledges that economic growth, employment, and salaries are significantly influenced by education hence "Investment in secondary education provides a clear boost to economic development, much more than can be achieved by universal primary education alone" (p. 2). Goldin (2016) asserts that the simplest model for investing in human capital is one where investments are made when it is anticipated that the benefits would outweigh the associated expenses. However, this model fails to address the location of the education, the one responsible for funding and providing it, and the role that the state plays throughout the process. Goldin (2016) addressed the issue of educational location and proposed a more adaptable system of education where both technical and geographic mobility are high. Goldin (2016) further addressed the second item omitted in the model about who pays for human capital investment and the role played by the state by alluding to the fact that "the collective individual to be involved in the provision of schooling such as capital investment in the building, hiring of teachers, and selection of curriculum, and it can also be involved in its funding" (p. 70).

The controversy that comes with the theory is the question why should governments make investments that benefit the individual. However, the argument fails to realize that human capital issues also determine the trajectory of the world's social-economic activities (Angrist & Patrinos, 2018). In this presentation, I find that human capital theory to be quite valuable because it controls how a country's revenue is distributed from one individual to the other, therefore education cannot just be a benefit of an individual. It is for this reason

as well that more authors have encouraged the government to make girls' education a high priority at various levels of education (Acosta and Evans, 2020) because "education in itself is a primary signal to labour productivity" (Martin, 2019 p. 1). It is truly believed that Malawi's educational policies such as the new investment policy fits well in developing human capital through provision of girls' secondary school education. From this point of view, "HCT remains universally sensible and acceptable" because "studies by various scholars fully support the positive contributions that the implementation of HCT can have on development" (Jill, 2016, p. 11)

Given this, it is advised that effective investments in girls' education should be either targeted or non-targeted to ensure that no girl child is left behind (Evans & Yuan, 2019). Due to the empirical findings, Duflo, Kiessel and Lucas (2020) recommended this strategy for a nation that gains political, economic, social, and technological developments. Blair (2018), on one hand, questions the theory's usefulness, claiming that HCT is disputed and unverifiable. On the other hand, Blair (2018) may not have contextualized the theory in the era of the decades' industrial revolution. Unskilled labor was thought to be ideal at the start of the industrial revolution. However, as technology and information became widespread, there emerged a demand for skilled labor. Those who studied the relationship between skilled labor and industrial growth, found it to be positively related. The finding counter-argued that HCT is verifiable and therefore dependable. The theory is most appropriate and applicable in support of investment in education, because "there has been a transition from human and animal power to machinery power" (Mohajan, 2019, p. 1) that require skilled labour.

The study is also guided by an anti-deficit framework, to highlight factors that influence persistent poor academic performance among girls in secondary schools. The anti-deficit framework as utilized in the literature on Black males, stresses that the Black males lack of academic performance, and therefore this approach as contented by Wood and William (2019) is the mostly effective methodology for examining the persistent girls' poor national examinations results in Malawi. The anti-deficit-based framework highlights the learners' experiences, programs, and resources that lead female learners to the highest levels of academic achievement. The deficit- based approach refuses to acknowledge that the majority of school characteristics and general shortcomings contribute to girls' poor performance in school (Manthei, 2016). It is believed that criticizing students for academic shortcomings is counterproductive and deficit thinking. In this paper, I suggest that girls in boys boarding facilities schools should be supported by pressing educators, lawmakers, and the government to consider alternative solutions to the problems that these girls experience by providing standard boarding facilities. The concept is crucial in providing answers to significant issues concerning why girls are at a disadvantage, underrepresented, and consequently do poorly in schools. Differences in academic achievement indicate if a student has a high or low pass rate. The factors that determine the pass rate are the policy measures, the numerous programs, and the experiences provided to the girls in boys boarding facilities school. According to Harper (2015), the A-DA inspires hope that success is possible when students are appropriately supported and encouraged in their academic pursuits. This is in contrast to deficit thinking, which assumes that education is the solution

to addressing inequality while ignoring the role those educational institutions play in preserving social inequality (Aikman, Cheffy, Jere, McGrath, Robinson-Pant, Rogers, & Themelis, 2016).

Early 1970s studies utilizing the "minimum group paradigm" gave rise to the Social Identity Theory. Malawi's secondary school classification is necessary for the theory's application, and it classifies the students. Students define themselves in the same way that schools do, and they strive to have favorable associations with educational institutions. Students who experience marginalization are less likely to think favorably about the atmosphere they perceive at school. The inability to uphold a positive selfconcept causes students in institutions they see as unlearning-friendly to lose motivation. Ordinarily, it is the levels of investment that determine whether the school is conducive or not for the learners' success. Levels of investment are the determining factor and result of girls' education on female secondary school education in Malawi and other Sub-Saharan countries. According to research, the world's highest level of educational disparity favouring boys is found in Africa (McCathy, Mensch & Psaki, 2018; UNICEF, 2020). Additional data reveals that girls' enrollment in lower secondary schools has lagged behind boys in the Sub-Saharan region (UNESCO, 2019). The capability approach used in this study aims to show that women can achieve greater success despite the fact that Malawi allocates few bed spaces for the girls in the secondary schools. This brings an assertion that seems to underrate the capabilities embedded in the female students.

Sen's Capability Approach (CA), which dates back to 1985, is utilized to guide new policy investment theory, which is based on the idea that females attending schools with

boys boarding facilities could not have superior prospects than what they might already accomplish. Amartya Sen introduced the idea of CA as a way of thinking about the enhancement of wellbeing and freedom in his role as an economist and philosopher. This inspires ideas for how to address the problems of poverty and inequality among girls. In research by Barnett (2021) in South Africa, CA was used to examine educational strategies intended to make chances for education available to all of the nation's citizens while redressing the effects of under- and inequitable development. According to Robeyns (2003) as cited in Barnet (2021), "the capability approach evaluates policies according to their impact on people's capabilities" (p. 388). Without taking an account of this learners are less likely to achieve good academic results. According to this theory, using the CA to analyze the new investment policy education might be appropriate and could address the above-mentioned three study objectives.

In conclusion, the conceptual framework is critical in understanding the learners' valued strengths as well as their barriers, allowing for appropriate intervention.

At-Risk Learners

This section discusses the obstacles that females face in accessing education. It is the amount and levels of obstacles that create gender gaps in education. Gender gap in education persists despite numerous international declarations, development goals, and major international effort. To comprehend why females are referred to as atrisk learners, this part focuses on the Sonani's (2017) study on "Girls Have a Right to Education Too." The study's objectives were to better understand the significance and effects of educating girls, investigate gender disparities in educational attainment and

significant barriers to girls' education, and suggest tactics to lessen disparities and raise awareness. This section's main emphasis is on Sonani's second question on obstacles among girls in accessing education. Therefore, the literature review outlines some of the major challenges such as poverty, poor menstrual hygiene, discrimination, inexperienced teachers, child trafficking and sex exploitation, kidnapping of schoolchildren, and the COVID-19 pandemic. More research has shown that girls, women, and children in the Sub-Saharan region are most likely to live in poverty (Inguta & Sumelius, 2020; Chala, Ede'o, & Ketebo, 2020). According to SOS (2018), Africa is the world's poorest continent, and women and children are particularly at danger of contributing to the problem. Poverty is one of the main barriers to females' education. The authors of Gutura and Manomano's 2018 article note that "poverty has historically been associated with women." Women are more likely than men to face poverty, and female poverty is more common because of the cultures that restrict women from owning property (Cagatay, 1998, p. 1), as cited by Gutura and Manomano (2018).

Additionally, women who lack education experience poverty at a much higher rate than men who lack education. According to Lampros (2005, p. 4), poverty among women is inextricably linked to a number of societal issues, including gender-based violence, poor health, illiteracy, a short life expectancy, desperation, and division between men and women. As a result of their lack of property ownership, women are perceived as being poorer (Gaddis, Lahoti, & Swaminathan, 2022). Because of this, women only marry in order to be possessed by the husband they choose. Women's failure to pay fees and fulfill

other school-related requirements prevents them from receiving a decent education that could help them escape poverty.

To ascertain whether poverty is associated with girls' academic failure, World Bank (2009) research findings are essential for comparison with countries that have abolished school fees. The number of girls taking their secondary school final examinations jumped by more than 50% when secondary school fees for girls were abolished, demonstrating that poverty was undoubtedly a barrier in the Gambia. More reports claim that even test results improved, and that more girls from lower-income households eagerly enrolled in secondary school (Blimpo, Carneiro and Jervis & Pugatch, 2019). A different study from Kenya found that removing tuition fees from public secondary schools increased access while also delaying the time when girls start having children (Brudevold-Newman, 2019, p. 9). However, there was little evidence of a decline in national test results to point to as a negative academic consequence. According to other research findings, poverty is a substantial barrier to girls attending school (Chikhungu, Chiwaula, Kadzamira & Meke, 2020). In the findings by Chikhungu et al. (2020), female dropout rates persisted even when school supplies including food, clothing, and stationery were offered. According to these results, free materials, scholarships, and bursaries weren't enough to make things easier for girls. This raises the question of whether poverty is the only factor preventing girls from attending school. The study frequently mentioned family responsibilities and lack of interest in school were the two most frequently reported reasons for dropping out of school among girls and boys as recorded in the Malawi Government's Education Management and Information Systems (EMIS, 2018). These results demonstrate that

while bursaries, scholarships, and other financial aid may be advantageous, they may not sufficiently lessen the girls' financial and social necessities to attend school.

According to research by Agarwal, Billaiya, Devi and Jain (2017, p. 23, table 2), which was done in India, 62 percent of the participants did not attend school because of poverty; other reasons included long commutes to school and early marriages. A different study by Malongo (2016) found that the Nkhata-Bay district had a high proportion of female high school dropouts as a result of financial difficulties. This demonstrates unequivocally that compared to urban regions, rural areas have higher rates of poverty and other socioeconomic constraints. According to statistics, 78 percent of girls in rural areas and 22 percent of girls in urban areas drop out of school. This shows that both rural and urban areas are affected by the issue of girl students dropping out of school. It is advised that efforts to support girls staying in school be scaled up by "delivering more egalitarian education systems" as more research show that poverty continues to be the biggest barrier to girls accessing education (Walker, 2019, p. 10).

Additionally, statistics from a study conducted in Nigeria by Ajufo (2019) showed that poverty was the biggest barrier to the education of girls. It received a rating of 48%. This was supported by cultural and religious norms, which were rated at 15%. Marriage and first pregnancies were also brought up. Mentioned as contributory variables were parents with low educational levels, male dominance, and parental ignorance or unfavourable attitudes. But that was strange.

Female students' attendance at school and menstrual hygiene appears to be strongly correlated. In rural schools in Zambia's Mumbwa and Rufunsa districts between

July and August 2015, Chinyama, Chipungu, Rudd, Mwale, Verstraete, Sikamo, Mutale, Chilengi, and Shama (2019) employed a qualitative exploratory technique to investigate menstrual hygiene management. Participants ranged in age from 14 to 18 years old. There were also 25 key informants, including teachers, female guardians, and traditional leaders. The study was significant since it showed how important a clean atmosphere is for girls to maintain their menstrual hygiene. Girls who practice good menstrual hygiene can routinely participate in school activities and raise their academic standing. The following were the misfortunes that the girls ran into, per the findings by Chinyama, et al. (2019). Most girls were unable to attend classes during their menstrual cycles. School restrooms lacked soap and water, and doors and locks did not provide any privacy. The toilets had a foul odor. The smell and the females' conduct, such as self-isolation and limited mobility, indicated that the girls were in their menstruation period at that time. The girls were filled with guilt and acceptance as a result of this, and they refused to attend lessons until the ordeal was done (pp.5-6).

Additional responses showed that some women were unable to commute without restriction because they had thigh burns as a result of friction and the wearing of wet clothing. Due to a lack of awareness about menstruation, girls were unable to effectively practice menstrual hygiene. Given that "cultural expectations and limits prohibit girls from being sufficiently informed about the realities of menstruation," Kaur, K., Kaur, R and Kaur, R. (2018, p.2) express sympathy for the girls. Without disputing the conclusions of Chinyama et al. (2019), more study demonstrates the need of providing women with the utmost dignity, privacy, and menstrual hygiene. Lack of access to

adequate services, facilities, and precise information prevents girls from managing their menstrual hygiene in school effectively, which frequently results in academic failure or absences during menstruation. The study's participants engaged in focus groups with semi-structured interviews and self-administered questions. After inspecting girls' toilets in each participating school as well, the study came to the conclusion that it was impossible for most of the schoolgirls to effectively and successfully manage their menstrual hygiene. This revealed that the girls' sanitary facilities had detrimental impact on their possibilities for successful education.

Another study with a similar emphasis that evaluated the menstrual hygiene of adolescent girls from urban slum areas showed that among the respondents, the respondents' menstrual hygiene was inadequate. 76 percent of the study's self-reported respondents said they were unaware of menstruation before menarche (Deshpande, Gharai, Patil & Satish-Patil, 2018). In this study, the researchers employed the cross-sectional approach and a pre-tested proforma to collect data from the respondents. It was found that adolescent girls' menstrual hygiene was unsatisfactory, necessitating the implementation of proper menstrual education programs and sanitary practices. The choice and accessibility of menstruation goods, which will be used to absorb and collect the monthly blood, is one of several components of menstrual hygiene management. The selection of menstrual products, however, is determined on the following factors, per Kaur et al. (2018): personal preference, educational level, awareness of menstruation, what is culturally acceptable, accessible, and inexpensive.

The findings of Chinyama et al. (2019) that the majority of adolescent girls lack comprehension about menstruation and access to sanitary products are supported by research findings from Montgomery, Henegan, Dolan, Steinfield, & Scott (2016). In order to determine whether there is a correlation between school attendance and girls' awareness and usage of sanitary products in schools, Montgomery et al. (2016) conducted a cluster quasi-randomized controlled experiment with 1124 girls in 8 rural Ugandan schools. According to a scant amount of research, female students who are menstruating in a classroom setting without access to gender- specific latrines face substantial challenges.

The results suggest that schools should educate students about menstruation to help girls take care of themselves and cut down on the number of days they skip class. Additionally, it was demonstrated that offering reusable toiletries was an effective strategy. On the other hand, inadequate education and a shortage of reusable sanitary products cause girls to stay at home out of fear of embarrassment (Hennegan, et al, 2017; Ndlovu & Bhala, 2016).

Schools also design their policies. Day scholars are exempted from being on campus when classes are not in session, according to one policy. This approach has been divisive, but it has proven to be beneficial to school administrators in curding school indiscipline. Students claim that the policy reduces the amount of time they have to finish specific tasks given to them by teachers. The administration vigorously enforces the rule to prevent girls from idly wasting time at school rather than returning home. The distance that students must travel to school on daily bases has some correlation to

problems like absenteeism, delinquency, truancy, tardiness, and indiscipline is another cause for concern. To fully understand the effects of the existing educational policies on the education of females in boys boarding facilities schools, it is essential to consider not only the relationship between the travel time to school and academic results but also the distance covered. According to studies conducted in Nigeria and Kenya, the farther a girl must travel to get to school, the more likely she is to miss class or quit completely. Girls who have to go a long way to school are more likely to be attacked and harassed. Girls who travel great distances have little time with their teachers, which affects their academic achievement. In societies that forbid women from seeking an education, distance renders females more vulnerable to harassment, aggressiveness, and intimidation in and around the classroom. (Oneye & Onyango, 2021).

According to the literature, discrimination is pervasive. In order to determine if children in Nepal who live at home have equal access to educational opportunities, Pokharel (2018) gathered information from 271 respondents. Parents in the home discriminated against males in affording them greater educational opportunities in the twenty-first century, according to the survey, which was conducted between 2013 and 2015. The observation seems accurate in light of the instances in which girls are harassed while they are defenseless. As a result, by the time girls reach puberty, many of them still live in their dreams rather than attaining their goals.

Women are underrepresented in several industries, including in top management positions and in leadership positions especially in the technology industry (Eurofound, 2018; Cook & Glass, 2016). It is observed that not even textbooks, which are the main

teaching resources in schools, adequately depict women. In Turkey during the 2018–2019 academic year, Açikalin and Ahin (2021) did a study to determine how gender was portrayed in all elementary and middle school in Social studies textbooks. Researchers discovered that as compared to men, women were underestimated. It was found that the percentage of male images in textbooks was almost two times higher than that of female images. Another finding that was strongly influenced by gender portrayed women as being in charge of household duties. The textbooks also portrayed women as the sole caregivers of children who were never seen with their fathers. In addition, women were underrepresented in the judiciary, professorships, lecturers, and management posts in schools. Similar findings show that males were overrepresented and girls frequently only appeared in reading materials for the very young children, according to the studies of the Chinese pre-primary and primary school textbooks as referenced in the Education For All GMR 2008.

Sometimes students believe that they are the targets of discrimination by their teachers, believing that they are denied opportunities or that other students are treated differently (Assari & Lankarani, 2017). For instance, girls might be compelled to sit on the floor, whereas boys might be allowed to use desks and seats. This is particularly obvious in classrooms with inadequate furniture. According to some research findings, teachers are reluctant to ask girls complex or abstract questions when boys and girls are learning together since they might not be able to respond. As a result, girls are deprived of the chance to develop the critical thinking and reasoning abilities that are necessary for an educated person. Other studies have shown that girls experience

discrimination because their families provide more attention to the boys in the household. Even though Caldwell, Smith, Wegner, Wegbright and Xie (2017) as cited in Breda and Mokoena (2019) reported that some studies have shown that males are more likely than females to drop out of school; that is a rare situation. The issue of female discrimination has been debated since the nineteenth century when Traditionalists made widespread propaganda that education was for men and that women were only meant to raise families and support their husbands (Dustman & Ku, 2018)

In Sub-Saharan Africa, child marriages are common and supported by some traditions. Child marriage was defined by Fiala, Nestour, Tavares, Wise and Wodon (2020, p. 2) as "a formal or informal union before the age of 18." According to the criteria, this indicates that Malawi has a high rate of child marriages, with 46% of females getting married before age 18 and 9% getting married before age 15 (UNICEF, 2017). It appears that the government's attempts are also failing. Approximately 125 million of the 700 million women who were married when they were minors live in Africa. The 125 million statistic seems to indicate that girls are more susceptible than boys. Despite some examples showing that boys have also been coerced into marriage, there are no statistics available that illustrate how many boys and men engage in this vice. Since child marriages interfere with a child's right to an education, this explains why women are at risk. Mlambo, Hlongwa, and Msthalia (2019) used a qualitative research approach in which thematic content analysis was used to construe more meanings to the overall content of the topic "The Implications of Child Marriages and their Developmental Effects on Young Girls/Women in Sub-Saharan Africa" in order to comprehend how child marriages make a girl's

school life more challenging. The literature on child marriages and associated difficulties was thoroughly examined by the researchers. It was crucial to ascertain previous research on the topic and identify any gaps where fresh information may be utilized. Data obtained around the country show that those child marriages are caused by deprivation, injustice, and a slow government response, and the absence of aggressive government initiatives (UNICEF-Malawi, 2017). One other element that contribute to adolescent pregnancy include failure by school girls and boys to use contraception and this puts the youths at risk of unwanted pregnancies (Kaphagawani & Kalipeni, 2017). The study by Kaphagwani and Kalipeni showed that over 76% of the study's 505 participants under the age of 20 who participated in face-to-face interviews at five antenatal clinics were found to have had an unplanned pregnancy. Early sex and marriage, low contraceptive use, low educational levels, low socioeconomic status, lack of knowledge of reproductive and sexual health, gender inequity, and physical/sexual violence were identified as factors contributing to teenage pregnancy by respondents.

Focus groups and in-depth interviews with married and unmarried adolescents, parents of adolescents, and significant community members were held in Mangochi and Nkhata Bay as part of a qualitative investigation of perceptions regarding marital withdrawal. This was a component of the More Than Brides Alliance program's evaluation. The program's goals were to delay marriage and increase access to sexual and reproductive health care in Malawi (Melnikas, Mulauzi, Mkandawire, 2021). The findings demonstrate that while girls recognized numerous disadvantages for withdrew girls, including stigma and reduced chances for school and employment after withdrawal,

parents and other adults viewed withdrawals as an appropriate resolution to a problematic child marriage. The study concluded that programs to address child marriage should also take additional measures to address more distant causes, such as poverty and a lack of viable options.

In Malawi, child marriage is also common, in addition to sexual exploitation. Although it is rarely recorded, this is allegedly a new phenomenon, and the habit seems to be spreading. A survivor describes being used sexually when she was nine years old by her mother's concubine. The little girl finally had the courage to notify her mother about her situation after months of severe sexual mistreatment. Unfortunately, the mother did not help the daughter; instead, she reprimanded and accused the girl of telling lies against the man (Louie, 2018). According to a study, 122 secondary school girls took part in focus groups, while 42 girls and young women between the ages of 12 and 25 were interviewed by Human Rights Watch. The majority of these females attended eight upper secondary schools and 14 public intermediate schools spread out over Senegal. Human Rights Watch found that some teachers abuse their authority by pursuing and engaging in sexual activity with minors. Teachers frequently use gifts like cash, praise, food, or new clothes and cell phones to entice the students. The report shows that for many years, victims of sexual assault have remained silent about their experiences (Prasad, 2018). In general, failing to report cases of sexual exploitation in schools suggests that efforts to address exploitation oppression at the school level are ineffective. However, some claims of sexual exploitation are increasingly being made, particularly in nations like Sudan and the Democratic Republic of the Congo that have seen extreme

levels of conflict (McAlpine, Hossain, & Zimmerman, 2016). This is a fantastic concept, particularly in view of the rising global awareness of the dangers of sexual exploitation. In relation to gender and family affluence, the prevalence of sexual abuse among 15-year-old Icelanders in the 10th grade was investigated. The findings indicated that girls had a greater than twofold increased risk of being sexually abused compared to boys. However, family affluence had more of an effect on the occurrence of abuse in girls than in boys. According to the findings, both female gender and low socioeconomic status may have individually enhanced the risk of sexual assault (Arnarsson, Runarsdottir, & Smith, 2019).

In most circumstances, males cannot be held exclusively accountable for the sexual exploitation of girls because anyone, including both male and female teachers, is capable of perpetuating the immorality in schools. This is supported by allegations that those who abuse the system are those in positions of authority and influence, as well as those who are older than the girls, and have the status and resources to lure the girls (Human Rights Watch, 2018). The reports further indicate that sexual exploitation is a form of compulsion and abuse that affects a girl's physical, emotional, developmental, and educational well-being (UNCEF, 2021). A person may experience oppression, exploitation, and discrimination of many different kinds because of their gender. For instance, women and girls are regularly the victims of kidnapping and human trafficking, especially at schools, which are considered to be the most reliable places for kids to feel protected. More than 600 pupils have reportedly been kidnapped from schools in the northwest of Nigeria, according to sources. This poses a serious threat to the nation's development and is having a negative impact on both boys' and girls' school

attendance. According to Luz (2013), there has been evidence that certain crises, such as conflict and post-conflict situations, cause an increase in specific crimes, such as the trafficking of girls. For example, 79% of the trafficked individuals were women and children (Global Report on Trafficking in Persons, 2016). For instance, in Sub-Saharan region in 2016, there were almost 29% more female victims of human trafficking than male victims, with the bulk of these victims being trafficked for sexual exploitation. Girls and women who are victims of trafficking are left defenseless because they are taken from their familiar homes and frequently placed in dangerous surroundings where they are given new tasks. Because they have been seduced, eventual "victims often share the culpability for these activities" (Loise, 2016, p. 647).

However, it seems that for obvious reasons, kidnappers favour taking girls over boys. Recent incidents in West Africa have shown that kidnappers frequently target schools. They abduct teachers in addition to students and demand a ransom. The increasing frequency of attacks is a serious cause for concern; for instance, data show that over a thousand children were abducted from their schools between April 14, 2014, and February 26, 2021, with the Government Girls Secondary School accounting for the majority of those abducted (Verjee & Kwaja, 2021). The truth of the encounter is often traumatic. It disrupts instruction and learning, which has a negative impact on pupils' academic achievement. For instance, some victims, especially girls, regularly endure different types of sexual assault. Some victims just marry off early, while others never return to school. Tragically, parents start to worry about sending their girls to school or consider having those who are already enrolled have them pulled. Further investigation

shows that girls' education in the northeast of Africa, which was already poor before the insurgency, has declined due to attacks on schools, education services have gotten worse as a result, and some young girls are being taught to be suicide bombers. Some sources claim that "some of the schoolgirls have been killed by the insurgents; some have been abducted, forced recruited, sexually exploited and abused, and displaced; while others have become refugees in neighboring countries" (Foluke & Hyacinth, 2017, p. 123).

There are worries that the continent as a whole and the future of the youth might face more serious effects if current kidnapping practices are permitted to continue. Parents, guardians, and the government all want students and teachers to be able to educate and learn effectively in a safe atmosphere, but this is becoming increasingly unachievable given the rate at which kidnappers are abducting children. This needs urgent attention.

School interruption is unavoidable in instances like the Covid-19 Pandemic and other disease outbreaks. The academic success of the students is impacted by these disruptions at school. For instance, at the end of the year 2019, an entirely novel virus known as Covid 19 was discovered in Wuhan, China. Due to the virus's rapid spread and numerous fatalities, the World Health Organization proclaimed Covid-19 a pandemic on March 11, 2020. The Covid -19 pandemic, which disproportionately affected women, had a tremendous impact on practically every element of human activity, including educational institutions and instructional strategies. In an effort to combat the COVID-19 outbreak, schools from kindergarten

to universities had to be closed. Instead, it was suggested that students complete their schoolwork remotely, online. Sothy (2021) made the following observations while analyzing the Covid-19 pandemic's consequences on Cambodia's educational system:

Teachers had been and continue to be impacted greatly in their workplace and professionalism; because teachers had to adjust to new challenging techniques of teaching and learning in a very short amount of time by incorporating distant learning methods into their practice (p. 15 par. 2)

Given that no country was ready for such a change in the way lessons were taught, this was by no means an easy task. There was no structure in place to guarantee that learners continued to learn when at home in Malawi because even home visits to students' homes were not feasible. Some nations, like Cambodia, conducted home visits so that instructors could keep track on pupils' academic progress. Nevertheless, the epidemic had a significant impact on educators, leading to delays in teacher preparation programs in Cambodia and elsewhere as a result of school transactions and a prohibition on public gatherings. Furthermore, the lack of in-person training and ongoing professionalism significantly reduced the effectiveness of teachers. Because governments believed that enforcing strict isolation measures was the greatest choice for limiting the virus, schools. They felt that overcrowding in crowded settings, such as schools, was to blame for the coronavirus's rapid spread in many nations. Even though many teachers and students weren't comfortable with this style of instruction, the government thought that learning will continue online (Handoyo, 2020; UNESCO, 2020).

It was widely noted that the unavailability of internet access and related technology caused challenges for both other educational institutions and other (Mustafa, 2020).

A separate study found that schoolgirls were more vulnerable than other age groups to the effects of Covid 19 between March 2020 and June 2021 in the Democratic Republic of the Congo, Malawi, Rwanda, and Uganda. This was especially true for girls from low-income households and rural locations. More girls were unable to enroll in distant learning because their homes lacked electricity, internet access, and accompanying equipment. As usual, girls were prohibited from attending online lectures because of additional household responsibilities and family obligations. Another study found that because schools were closed during the Covid -19 pandemic, schoolgirls were more likely to endure sexual assault, forced labor, and early marriage (Muluye & Tadess, 2020). Recent estimates indicate that school closures increased the rate of girls dropping out before completing their education (Umair, 2020). The story's most unfortunate part is that these are the same girls who have fought to enroll in nearby schools so they can get a fundamental education. Girls are more likely than males to drop out of school when schools close suddenly, according to UNESCO (2021).

Educational investments

The advantages of emphasizing women as a means of reducing poverty and achieving social, economic, and political advancement are covered in the opening paragraphs of this section. Despite the fact that the length of education needed to transmit core knowledge and skills differs by country, women's education is one of the best

investments in development (Kaffenberger & Pritchett, 2021). Two comparable data sets that comprised measures of schooling, assessments of literacy, and life outcomes in more than 50 nations were used to show the association between women's educational attainment and fertility, infant mortality, female empowerment, and financial practices. Education is a huge investment in human capital. A population that is well-informed considerably improves the society in which they live. Education raises living standards more than any other social expenditure.

The relationship between economic health and education is mutually beneficial. Everyone in the community benefits from education, not just those who are educated themselves. In turn, a more knowledgeable public encourages support for more education. It is becoming more and more challenging for local and state governments to strike a balance between the expectations of their citizens and the unfunded and partially funded obligations imposed by the federal government. There are only four ways to meet financial obligations. First, as this chapter has shown, the economy can be "grown" to meet requirements by investing in human capital. As the economy grows, the tax base expands as well, bringing in additional revenue for services. The second option is to scale back or discontinue services to cut costs. The 1929 Great Depression saw an increase in the adoption of this alternative. The third option is to raise taxes, but doing so is becoming more difficult. The fourth option is to borrow money and take on debt. Investing in human capital through education is the most pro-active and durable course of action. Despite this, there are passionate supporters and opponents of different points of view in the discussion around funding for education. Taxpayers call for lower taxes, yet different

government agencies disagree on how to allocate taxpayer funds. Parental choice, tuition tax credits, or school voucher programs, for instance, are supported by interest groups that complicate funding decisions for education even further and may cause funds to be diverted away from public education and its investment in human capital generally. Knowledgeable educational leaders can effectively advocate for the funds needed to support education in their individual district and state by using the data on human capital investments offered here. The human capital that may be acquired through the long-term investment of funds in education would make any financial analyst jealous.

Data show that women who are more financially independent tend to spend more money on necessities like food and healthcare as well as education. Research indicates that supporting women's education benefits not just the woman but also her family and children (Chuang, Mensch, Melnikas, 2019; Psaki et al., 2019). With these results, not only are the lives of women and families bettered, but poverty is also fought against and economic growth is promoted. Women and girls must be educated, and obstacles to their advancement must be removed, in order to attain gender equality. To the economy's advantage, barriers to women's education and employment can be addressed and eliminated.

Investments in women's health, education, employment opportunities, and empowerment have a major positive impact on the economy. India spends less on women's health than on men's health across all demographic and socioeconomic groups (Bora, Moradhvaj, & Saikia, 2016). The paper by Spies and Voigt (2020), which examines the urgent need for female education and its social implications in a community of men-

only mountain dwellers using Nagar District in Pakistan as a case study, demonstrates how these changes impacted the local conceptions of women's social roles. It also demonstrates the rapid expansion of educational opportunities for young mothers and girls.

A longitudinal study of four private schools in an English geographical area sought to understand how the schools differentiated themselves as 'elite.' The findings demonstrated how each of the schools strived for academic excellence as well as the development of the whole human. This meant that each educational system was created with the goal of remaining competitive. It appears that how an education system is tailored to attract all types of learners determines how advanced education becomes (Aggleton & Maxwell, 2016). Differentiation of schools is thought to have sparked a burgeoning field of academic research into the elite educational system. The literature revealed that schools were differentiated based on a single criterion: whether the school was a typical independent school, whether the school offered a unique curriculum, whether the school had been around for a long time, whether the school was in a specific location with unique extras, and finally, whether the school was for a specific class of people. Elite schools typically boasted a long and illustrious history of stability and excellence, and their graduates were able to enroll in "prestigious" colleges. Aside from that, it is the responsibility of learners, parents, and guardians to choose the best education system that is appropriate for both their economic capacity and their aspirations. According to Howard (2016), who conducted a grounded theory study titled "Adapting to boarding in an international boarding school," there is a significant demand

for boarding school education, which allows parents with more money to invest money into their children's' education. Even though there is constant discussion over the long-term effects of boarding school experiences, parents, students, and communities still choose boarding schools to day secondary schools.

The assimilation strategies that were employed to bring the boarding school education system to the West are covered in the section that follows. According to literature, agreements were forced upon the Native Americans to share their land and resources with the Euro-American population. This is emphasized in the analysis of key historical impacts on the Euro-American population. The Euro-Americans came to the conclusion that assimilation was the sole means of obtaining Native Americans' other vital resources and gaining access to their land for colonization and development. By taking Native Americans away from their families and putting them in boarding schools, the strategy reportedly sought to civilize them. Reading David Adams' paper titled "Education for Extinction: American Indians and the Boarding School Experience, 1875-1928, the goal of the assimilation policy, which was implemented through boarding schools, was to convert Indian kids to "American" ways of thinking and living. Native American children's culture and religion were oppressed by the curriculum. According to Kachur (2017), Indian pupils were forbidden from neither speaking their tribal languages nor exercising their tribal cultures and beliefs throughout the early boarding school era, which lasted from 1879 to 1930. Feir (2016) noted that learners were penalized if they spoke their original language, and rewarded if they did not. The federal government of the United States imposed rigorous requirements

for Native children to assimilate to white modernity. This was the first time the boarding school education system was mentioned as a means of civilizing indigenous peoples (Newton, 2017; Eder & Reyhner, 2017). Therefore, the main goal of the introduction of boarding schools was to "assimilate Indians by getting rid of their tribal cultures" (Kachur, 2017, p. 4). This statement about the role of boarding schools is also found in Peterson (2017, p. 15).

It is further noted that not all Indian children accepted assimilation due to the horrific difficulties inflicted on the Natives whilst in boarding schools (Kachur 2017). For instance, the boarding school lacked the proper cuisine for the students, there was poor instruction, overcrowding, and inadequate medical care (Olson, 2020). In addition, the students' hair was chopped short as soon as they arrived at the school. The assimilation policy of the United States was based on the saying "destroy the Indian in him and serve the man" (Kachur, 2017, p. 2). Young (2017) fails to identify the speaker of this remark in his dissertation on the Canadian Indian Residential School System, but he does tell us that the phrase was meant to eradicate Indianness by promoting civility (p. 12). One could contend that the assimilation technique did not provide civilization to the Native American people but rather strained relations by pushing the Euro-American way of life on them (Gregg, 2018). The 1819 Civilization Fund Act strengthened the assimilation strategy even more. The rule that was passed, however, allowed boarding schools to only accept local pupils with parental consent. However, the law was not upheld because the US authorities forcibly removed all native children from their homes (Reyhner & Eder 2017). This seemed to be in conflict with the law, which made concerns

of abuse and neglect in boarding schools inevitable. Research has also shown that Native American children have gone missing and never been found, and the government has failed to make an effort to find them. The mistreatment of the students and their disappearances had terrible repercussions. As a result, boarding school life was disliked by Indigenous communities, families, and individuals.

The scientific revelation that boys and girls have different brain development and have different learning tendencies is one of the reasons single-sex schools and courses have thrived, particularly in the United States America. The primary goal of single-sex education is to minimize interactions with students of the other sex for greater academic, social, and emotional growth with the hope that this safe atmosphere will eradicate any harm caused by opposite-sex classmates. In fact, single- sex education makes it less likely for students to go to parties and form romantic connections when they are teenagers (Kaufmann, 2017). According to data, single-gender schools are more successful, especially for females. But one has to wonder if this is really the case. According to Chen, Liu, Xu, and Zhang (2021), the introduction of single-sex classes can be used to raise girls' academic achievement so that they can develop their inner confidence through the school model. Additionally, single-sex schools were seen to be the most effective way to lessen prejudice and inequity brought on by different genders in the educational system. In the past, education that focused on information and abilities was generally geared toward men, while education for women was largely focused on instilling values such as religion and morality. Girls were simply taught how to sew or how to be good mothers, while boys were taught English, Arithmetic, History,

and other subjects. Over the course of the following century, society and the government finally started to take this educational disparity seriously. Parents in the United States asked for single-sex education at the start of the twenty-first century because they thought it would lessen distractions for their students. According to widespread opinion, boys and girls need different lesson delivery strategies and methodologies because they are essentially different from one another. There are claims that single-sex education has advantages because studies have shown that there are gender differences in the brain, as described by a French surgeon named Paul Broca, who in 1861 weighed 422 brains and came to the conclusion that men were smarter than women because their brains were heavier. This information did not, however, show a clear correlation between IQ differences between men and women. According to a paper that updates data from Psacharopoulos and Patrinos (2018) and investigates current trends and patterns using 1120 estimates from 139 countries between 1950 and 2014, the private global average return to a year of education is 9 percent annually. It demonstrates that private returns to higher education have risen, raising questions about equity and funding. This shows that women continue to have larger average returns to education than men, and that social returns to education are still substantial. Girls' education must therefore continue to be a global priority.

However, as previously mentioned, single-sex schooling is a contentious issue that sparks heated debate. One of the most frequently raised questions is whether single-gender schools boost student achievement and whether these advantages are observed in both boys and girls. In response to the questions raised, Mael et al. (2005)

as cited in Jackson (2016) note that in most countries, single-sex schools have been associated with better educational outcomes. To illustrate this important topic, Dustmann Ku and Kwa (2017) used a random selection policy in Seoul, South Korea, in which learners were assigned to academic high schools within districts at random. Boys and girls who were randomly assigned to all-boys or all-girls schools did better than boys and girls who were randomly assigned to co-educational schools. Studies on the effects of single-sex education on girls' achievement have produced a wide range of outcomes. According to certain studies, females who attend single-sex schools are likely to perform better in coeducational settings. The researchers went on to say that any disparities in student results across these schools could be attributable to a direct effect on the virtue of being male or female, as well as other visible or invisible school characteristics. Girls at a single-sex school, according to Archard (2018), are prepared with the knowledge and abilities they need to fight against gender inequalities. Girls and women can no longer be misunderstood in society in this way. Furthermore, researchers discovered that girls who attend a single-sex school (girls) are just as confident as males who attend a single-sex school (boys) (Fitzsimmons, Yates & Callan, 2018).

Language subject is rarely a contentious topic in single-sex studies because girls are typically seen to have advantages in verbal expressiveness and language learning skill against coeducational school. The fundamental reason why boys and girls learn in different ways is due to physiologic differences. Men and women have slightly differing brain perception capacities, to start. Girls can focus more calmly on writing,

reading, and other tasks since their hearing is often better than boys', and they will perform relatively better on associated listening and lecture examinations. Boys typically have higher spatial and kinesthetic senses. Boys found it challenging to stay seated and pay attention on education. Most of the time, they'll be skilled at using visuals and movement to improve learning ideas. In a separate study, it was discovered that when single-sex schools were transformed into co-educational institutions, both girls' and boys' academic performance began to decline. The research also revealed that students' academic performance is influenced by their environment. Official statistics from the Caribbean Secondary Education Certificate (CSEC) for the years 2013 to 2017 show that girls from single-sex schools in Jamaica, St Lucia, St Vincent, and the Grenadines, and Trinidad and Tobago had higher pass rates in the field of Mathematics than girls from co-educational schools. (George & Spencer- Ernandez, 2016).

It is suggested in this study that there is strong evidence to shift away from the deficit model to the Anti-Deficit Achievement Frame, which aims at reforming the schools given that the problems facing learners attending deficit-focused schools include wide achievement gaps and low graduation rates (Scroggins, 2017, p.4). Based on the above statement, the current study looks into the Ministry of Education's practices that contribute to making some secondary schools become deficit-focused girls' learning environments. Additional research investigations demonstrate that single-gender classes or schools were one of the solutions recommended in response to American children's poor performance on standardized mathematics and science knowledge examinations when compared to their classmates from other countries. Due to this subpar performance,

suggestions have been made to enhance the curriculum in public schools. Boys and girls should be taught separately in classrooms or schools, according to those who favor single-gender schools, as this will increase student achievement and academic engagement (Dustmann et al., 2018). Despite having the best of intentions, single-gender public school initiatives don't seem to be succeeding.

Discrimination against men, as well as cultural and religious preconceptions about women's potential and intelligence, have historically limited women's access to higher education. Although early cultural and religious beliefs had a negative impact on how people thought about female sexuality, sin, chastity, womanhood as procreation, sexual reproduction, and gender roles in many communities around the world (Portugal, 2015), American women were eventually allowed to attend school alongside men. In some schools, male and female students took separate classrooms, while in others, they took lessons together.

In the twentieth century, for instance, women in the United States began to be accepted to institutions that were primarily attended by men. Since then, co-educational educational institutions have become widespread in the US. Though there has been significant debate, some have argued that co-educational schools put girls at risk since they can be overlooked and rejected (Pahlke, Bigler, & Patterson 2014). Some authors claim that girls at co-education schools seem to be more concerned with their personal traits than girls in girls' schools (Kim & Kawachi, 2016).

Furthermore, research findings in the United Kingdom show that girls in singlesex schools have an easy time improving their self-esteem, which is crucial not only for their social well-being but also for their academic success (Geelong, Martin, O'Brien, 2016). According to Scroggins (2017, p. 23) "most educators take it up that single-sex schools offer academic success because the single-sex school put focus on developing the whole child targeting his/her gender-specific learning styles during pedagogy development". Despite the above fact, co-educational boarding schools are the most popular in the United Kingdom. Although the boys and girls share the same classrooms, they reside in separate dormitories and use separate baths and toilets. They do, however, share a dining hall and leisure fields, allowing for even more contacts. Because co-educational schools prepare students for life, it is stated that boys and girls do not need to be segregated because this helps to demystify the state of being a girl or a boy. This fact is offered to encourage students to form close bonds and gain confidence from an early age so that they can live, work, and promote one another. Teachers preferred co-educational schools to single-gender schools, according to a survey done by Sari (2017) in Turkey. The survey included 142 females and 84 males, and the goal was to find out how teachers felt about co-education in terms of gender. Overall scores revealed significant variances in favor of female teachers' mean scores. As a result, it's possible that the gender imbalance in the research parameters influenced the outcomes.

Evidence from the research study was used by Amarathunga, Karunanayake and Umesha (2020) to support their claim that educational systems have an effect on students' academic progress. The study evaluated girls' academic performance in single-sex and coeducational settings in order to identify the ideal educational system in Sri

Lanka that may enhance schoolgirls' academic performance. The study used a qualitative research design. From the Central Province, one single-sex school and one coeducational school were selected. A semi-structured interviewing strategy was used to conduct eight interviews with participants that included two female students with average academic status, one teacher, and one mother picked from each school using the practical sample method.

The study's findings showed that, in both institutions, female students' involvement in extracurricular activities, peer relationships, subject-related knowledge, goals for higher education, and many other factors had a different impact on their academic performance. Mothers claimed that regardless of whether their daughters attend a single-sex or coeducational school, they typically support them in their academic endeavors. The teachers claimed that teaching in single-sex and coeducational schools was much different from their previous experiences and training such that girls who attended single-sex schools performed better academically than girls who attended coeducational schools. The study's findings are in line with other studies' findings, which demonstrate that a variety of factors, including learning environments, gender, age differences, and school type, among others, affect kids' academic achievement (Karunanayake & Umesha, 2020). Overall, it appears that both organized systems work well under different conditions. Indigenous education was practiced in Malawi prior to the introduction of formal education, and it's conceivable that traditional teaching methods were used to encourage the development of pupils' cognitive, physical, and behavioural skills. The objective of this kind of education, like the ones provided now, is to prepare

students for their societal responsibilities in the future. Therefore, it may be misleading to assert, as several scholars have done, that colonizers introduced education to Malawi. My opinion is that colonizers just added their brand of education to the native population.

Furthermore, it appears that the impression failed to take into account what occurred in traditional education. It is crucial to note, however, that traditional education was insufficient because it concentrated more on boys than on girls. The boys were supposed to provide for the family, while the girls were supposed to look after the house. In addition, unlike the colonizers' education system, there was no uniform manner of assessing learners for certification or graduation (Chibambo, 2018). The fact that both girls and boys were taught to read, write, and count, was significant in formal schooling. Interestingly, the majority of missionary institutions also provided vocational training (Chirwa & Naidoo, 2014) for survival after school.

Now I turn to describe day school schools versus boarding schools. The correct definition of a day secondary school is one where students come to school to learn and then return home. However, it appears that Malawi does not have true day secondary schools, as boarding facilities are either given to boys or girls. It is common knowledge that there was a pressing need to increase the number of students enrolled in secondary schools shortly after independence. Because it was nearly difficult to create secondary schools across the country at the same time, therefore, some localities banded together and began constructing day secondary schools. Because of the success of these programs, the government ensured that each district needed to have its small day secondary school. Therefore, the government stepped in

to provide new classrooms, staff housing, and lodging. The accommodation was crucial since students who came to learn in such schools were chosen from all around the district. Before this, some students stayed with relatives, while others used the classrooms as dormitories at night and used the rooms for lessons during the day. Eventually, boarding facilities were made available to the majority of day secondary school students. In this study, the focus was on day secondary schools with solely boarding facilities for boys, whereas girls have none.

Education as a tool for political campaigning

The ideas in this section are meant to help Malawi's secondary school system become more effective through stronger governance practices. This is done by evaluating how the government influences educational quality in light of the policy recommendations as researched by Abugre (2018). Understanding the creation and execution of policies that supply public goods like education will be necessary through the perspective of economic governance.

In the light of the above, Al-Malkawi, AlShiab, and Lahrech (2020) paused a research question in a study on how governance affect education quality in sub-Saharan Africa. The study looked at the relationship between governance and "education quality" in a group of 49 sub- Saharan African nations from 2000 to 2012. The "student teacher ratio" in primary school was used to measure the study's outcome indicator, which was inadequate educational quality. Given that a higher ratio of the variable signified low educational quality, this dependent variable was a bad economic signal. This is primarily due to the fact that a lower ratio indicates higher educational quality because fewer

students are taught by a given teacher. Recent works on education in Africa have employed this measure of educational quality (Asongu & Odhiambo, 2019); this is in contrast to the current study, which employed the public university selection rate and Malawi School Certificate of Education examination pass rate as indices of education quality. The relationship between governance and education quality makes intuitive sense because, based on the concepts and definitions of governance dynamics discussed above, low governance quality is expected to have an impact on the government's ability to offer high-quality education.

Based on Fourie (2016), the historical viewpoint on education in Africa shows that many African nations currently exhibit low levels of education, with Sub-Saharan Africa's average literacy rate falling below the global average of 84 percent to 62 percent. In general, colonizer influence and independence are the two main causes of Africa's relative underperformance in the education sector. And this acknowledges that colonizers had a significant influence on African education and learning (Fourie, 2016). The impact of Livingstone's interior-African discoveries, which enabled some European powers to dominate and exploit several African states to their advantage. Additionally, the story continues to tell that in the twentieth century Africa experienced both positive and negative effects in their educational system.

It's crucial to remember that after World War II, European colonizers realized that their explanations and beliefs were no longer valid, and they would no longer maintain colonial authority, underscoring the need of independence. African nations began to demand independence from their colonists as a result, and between the 1950s and

1960s, the bulk of African countries attained independence. Due to the necessity to educate locals who could serve as administration and spearhead economic development, the creation of formal educational structures advanced dramatically throughout the post-independence era.

In several cases, the method used for determining who gets educated and how they are educated is determined by the politics of the state or government. Politicians are the ones who control how the money is dispersed and which sections of the education receive what portion and how much. In short, the politician shapes the educational attainment of children most directly through laws that govern the country's school system. If the government decided that female education is more important than male education, then it is likely that most educational policies lean toward the provision of female education. One way in which countries can encourage female education is by not restricting employment opportunities for women. This action has the potential to lead parents and other government agencies to consider making more investments in female education knowing that there are meaningful gains in educating females.

The impact of politics on quality management techniques in the secondary school in the Southern Nations, Nationalities, and People's Region (SNNPR) of Ethiopia was examined in a study by Ambo, Chan, & Dabi (2021). Data were gathered from specialists from the Ministry, regional education bureau, zonal education department, and education offices using a multi-case research methodology and purposive sampling technique. The study found that the internal management of the educational system has been impacted by the political practices of the nation. The study came to the conclusion that

politics had an impact on the autonomy and quality control systems in secondary schools. Government policy directs the education system which serves to further political goals. Thus politics determines the type of education a country offers for its citizens. As a results, politics influences educational policies.

Studies on the reasons for poor student achievement in Ethiopia resulted in different findings. Such as lack of inputs (Belay and Melaku, 2019; Melaku, 2019) and ineffectiveness of school leadership (Dimo, 2017; Dimo, Tekaligne, & Wubayehu, 2017; Kemal, 2016). Other reasons include the lack of teacher and student motivation and commitment to the teaching and learning process (Dagne & Beshir, 2019; Giertz, 2016). However, the authors found out that there was no research on the influence of politics on quality management practices in Ethiopia. The research gap was identified based on the fact that "the intention of politics can have a positive or negative effect on the quality of education and its management" (Ambo, et al., 2021).

One wonders if politicians follow through on promises made during campaigns once elected into office. This is the puzzle that the electorate frequently experiences before and after elections. According to reports, during the Democratic Progressive Party (DPP) presidential candidate Arthur Peter Mutharika's whistle-stop tours in Mzuzu during the 2019 May 21 Tripartite elections, he pledged to increase education service delivery in the Northern Region. The situation of school infrastructure, according to the presidential candidate, is "in a bad state." He promised to establish 200 new schools, including seven new secondary schools in Mzimba and a secondary school with girls' dormitories in Mzuzu (malawi24.com). When people vote for a politician, they are

essentially endorsing such policies in the hopes of seeing them enacted. For instance, Malisa and Missedja (2019) addressed cases in which governments come up with a multitude of educational policy changes each time there is an election in an essay titled "Schooled for Servitude: The Education of African Children in British Colonies, 1910–1990." It's no surprise that nearly every African country that was a British colony transformed its educational institutions. The transformations included everything from nation-building to national healing. Colonial educational policies, according to Ndlovu-Gatsheni (2017), reinforced racial and ethnic segregation and promoted undue royalty to colonists. In other nations, including South Africa and Zimbabwe, the effects of implementing such segregated educational curriculum led to a shortage of school spaces for indigenous children.

In Malawi, the Ministry of Education announced a policy change in 1964 that prioritized the building of secondary school infrastructure to produce more middle managers to drive economic and developmental agendas. According to this account, Malawi adopted the factory model of education. The needs of the industrial society were met by the current educational system. The system requires students to study the same material in the same amount of time at this type of factory-model, industrial-age school, which has separated learning into many different topic areas. Regardless of whether they have learnt anything, students are required to carry through with the lesson. Eventually, a large number of students accumulate as a machine without having their own unique thoughts. We transitioned from the industrial to the network ages as society developed. In this post-independence period, education no longer operates on a factory model where

students are treated like learning machines. Reigeluth proposed a "the draft for school system changes" that centered on the topic of education reform. The changing nature of teaching is a result of the information society. In the industrial world, teachers firmly believe that they are the representatives of knowledge. It is known as teacher-centered instruction when teachers stand in front of the class with the textbook in hand, while pupils sit one at a time to listen and take notes simultaneously. In this type of teaching style, teachers determine what students will learn and how they will learn it, and the final exam serves as the students' evaluation. To address the needs of each individual learner, the educational system seeks to change from being teacher-centered to being student-centered. The goal was to boost secondary school space to combat nation's segregated education policies, which limited the number of schools available to Malawian children. The country had to alter its curriculum to suit the needs of an independent nation as part of the process. The educational curriculum was brought in to instill a culture of deference to the colonists because policies are political, and they cause a slew of public concerns.

Malawi's agro-based economy required a substantial and rising supply of middle—level skills when it gained independence in 1964. As a result, the government's policy at the time was to increase secondary school education access by committing to the construction of twenty-one new day secondary schools around the country. When each of the districts had its day secondary school, the initiative was scheduled to be phased out. Further demands were that the government investigate increasing accommodation in current schools as soon as possible and improvise where practicable and feasible. This

conveyed the impression that boarding schools would not simply be phased out, but would be phased out gradually.

Over the years, the government has made every effort to expand secondary education through new policy reforms that have gone beyond suggested improvements in secondary school expansion and organization, improved student selection procedures, and the construction of new day secondary schools (MESA, 2019). From 1964 to now, the government has steadily executed a policy shift away from the costly boarding school model to a day school one. This was to be accomplished by implementing a school model that involves parents and school management working together to give a high-quality low-cost education to the majority of adolescents who would not be placed in a national residential secondary school.

Parents and the community were the primary providers in district boarding facilities under this paradigm. This meant that the government was solely liable for boarding fees at the four government national boarding schools, with the remainder of secondary schools being controlled by the District Councils. The new policy revisions aimed at accommodating more students while also educating the proper ones through merit-based selection. Because they were real "schools near to home," most of the new day secondary schools that were being built were too small to reach learners where they were, and thus the size of the secondary school did not matter at all.

This explains why, until the late 1990s, the first district day secondary schools used a double-stream system in grades one and two and a single-stream system in grades three and four. Despite having a policy of building new district day secondary

schools all throughout the nation, the government started to worry about the random opening of more schools since it was unsure how to pay for teacher salaries, infrastructure development and maintenance, and other ongoing costs.

The procedure of enrolling in Form One has been difficult all along due to the low number of secondary school places available, and even when new secondary schools were created. Merit selection is utilized because the government cannot admit all students to secondary schools. Most governments tend to rationalize merit-based selection as a "quality control instrument" for maintaining education standards in each secondary school. Despite this assertion, it is stated that Malawi's secondary school education is deteriorating. According to research published about the contributing factors for the deterioration in the quality of both primary and secondary education in Malawi are overenrollment, bad teachers, poor teaching and learning materials, high pupil- teacher ratio and many other factors (Mulera, Ndala &Nyirongo, 2018; Chiotha & Mlangeni, 2015). Because secondary school growth has not kept pace with the student population, there can be no over-enrollment without high-pupil teacher ratios.

According to 2017/18 figures, there were 1486 secondary schools in total, up from 1411 secondary schools the previous year. According to the data, 1137 secondary schools, or 77% of all secondary schools, were located in rural areas in the 2017/18 academic year, while 349 secondary schools, or 23% of all secondary schools, were located in urban areas. As a result, overall enrolment for rural schools, as represented by schools within district councils, was 304,327 in 2019, compared to 73,404 for urban/city council schools (EMIS, 2019).

Unfortunately, the majority of these schools in remote locations fall into the Community Day Secondary School category. This gap is understandable, however, because Malawi's rural population accounts for 80 percent of the population (EMIS, 2019). From the 2015/16 fiscal year onwards, the government of Malawi switched from output-based budgeting to program-base budgeting when it came to education investments (EMIS, 2019). Under Basic Education, Secondary Education, Higher Education, and Management and Administration, this is the allocation of resources based on planned and authorized plans. In general, the Basic Education Program receives the most funding. Because of the complexity and importance of the programs' operations and duties, the Basic Education Program received 62 percent of the education sector's recurrent budget in the 2018/19 fiscal year.

The bad news is that a major chunk of the money goes to salaries and subsidies for the Primary School Improvement Program (PSIP). MK119.9 billion of the MK140.3 billion allocated under Basic Education in the 2018/19 revised budget was for salaries for primary school teachers, implying that salaries accounted for 85 percent of the sources under Basic Education and only 15% for other recurrent transactions such as the purchase of teaching and learning materials and other school activities.

In comparison, the Secondary Education Program received 13 percent of the entire recurrent budget in the 2018/19 fiscal year, which was higher than the 12 percent granted in the 2017/18 fiscal year (EMIS, 2019). MK19.2 billion of the MK29.6 billion approved allocations were for salaries for secondary school teachers, accounting for 64.8 percent of the program's recurring expenditure. The remaining MK10.4 billion was set

aside for Other Recurrent Transactions (ORT) expenses, which include the acquisition of teaching and learning materials as well as the day-to-day operations of the country's roughly 850 public secondary schools and community day secondary schools (CDSSs) (EMIS, 2019).

For the implementation of the program, the ORT monies were primarily used to buy instructional materials. Out of a total budget of MK1.5 billion (SND), MK300 million was spent on instructional materials for the Special Needs Department's implementation of inclusive education. Recurrent operations at the six Education Division Offices, all cost center secondary schools and non-cost center secondary schools, as well as payments of bursaries and cash transfers for needy secondary school students, were all given MK6.4 billion.

Secondary Education received the second -largest allocation under the Development Budget in the 2018/19 fiscal year, which is encouraging. Construction of extra girls' dormitories, renovation of secondary schools, and construction of additional secondary schools, construction of Science Laboratories and Libraries, and acquisition of more desks for Community Day Secondary School were among the budgeted activities.

New day secondary schools were created in what used to be concentration camps at the District Headquarters soon after Malawi gained independence in 1964. This explains why each of the newly built day secondary schools was named after the district's name and was called a District Day Secondary School. Most day secondary schools began in borrowed buildings, and others began as night schools for both boys and girls, due to an urgent and important situation that arose at that moment.

The administration intended to gradually reduce boarding secondary school places while increasing day secondary school places. The government quickly built two science rooms and four teaching classrooms to implement the policy, which meant that every classroom was used. The official capacity of most day secondary schools was 240 students, with 200 boys and 40 girls. Because there were no boarding facilities for girls, they were taken as day scholars. Girls were only allowed to attend Forms 1 and 2 during the implementation period.

Only forms one and two at the school had a double stream, whereas forms three and four had single streams. What this meant was that there was fierce competition among the learners at Junior Certificate Level for one to advance to Form Three. The schools initially offered twelve disciplines; however, each learner was required to study a maximum of nine subjects and a minimum of six subjects to qualify for a certificate at either junior or senior secondary school levels. Those who did not pass the Junior Certificate of Education examinations did not advance to form three. Those who obtained some passes at the Junior Certificate of Education but did not receive a certificate but could pass on the second attempt were advised to repeat the program on the condition that they were disciplined and would fully utilize the opportunity to excel. Girls were never allowed to advance to form three because of the government policy at the time. Girls who passed the JCE examinations were sent to different residential schools. Boys who passed the JCE but were not accepted into form three were urged to seek employment. JCE was by then used to seek employment in public as well as private companies. The

first students in these newly built day secondary schools were selected from letters of application sent to the District Education Office.

The District Education Officer (DEO) was in charge of issuing admission letters to the selected students. The letters were subsequently forwarded to the Secretary for Education, who was based in Zomba at that time. The compiled list contained the learner's primary schools, as well as their examination numbers and the basis for the application. Following the initial pick, a reserve list was created for the second and, in some cases, third selections. According to selection and admissions policy, students were assigned to the secondary school from nearby primary schools within a 5-mile radius, but not beyond a 10-mile radius.

Malawi has always maintained secondary schools using two different school models: boarding institutions and day schools. It is critical to comprehend the words "school model" and "school system" in this research. The word "education system" usually refers to public education rather than private education. In this study, a school model indicates how the school is administered in terms of whether it is a boarding or day secondary school, whilst a school system describes how the institution is categorized in terms of its type. Where a school system exists, however, a school model is more easily identified. As a result, boarding schools only exist in educational settings where there is a need for them. As differentiated, these school terms support the idea that a boarding school model is the best alternative for achieving academic success and achieving personal goals.

The availability of a kitchen, dining hall, hostels, enough staff residences, and recreation facilities, which suit the learners' social prerequisites and educational demands, makes the boarding model preferable to other school models. Because of the extras, boarding school models require significant expenditure. This means that running residential schools can be expensive for donor-dependent countries like Malawi. In countries with the necessary resources, the entire composition of boarding facilities is vital and irreplaceable. This bolsters the government's case for gradually phasing out boarding schools in favor of day schools.

This policy shift looks to be a concern for parents who do not want their children to commute from home to school. Because boarding schools exploit economies of scale, it is believed that keeping children at home is more expensive than sending them to a boarding school. Bed and board, which translates to lodging and meals, is a comprehensive definition of boarding. Consequently, some schools are permitted to offer lodging and meals in addition to their regular teaching and learning obligations. On the other hand, some schools are only allowed to educate and study and the schools are not allowed to give lodging or meals. As a result, the government's new investment policy in principle denies girls in boys boarding facilities schools from accessing lodging and food while allowing the boys only to access lodging and food. The current government policy of constructing girls' hostels in the new community day secondary schools is essentially an attempt to introduce a boarding model in which lodging and meals may be supplied within the Community Day School System's confines.

In countries like the United Kingdom, Germany, and Switzerland, boarding schools were commonly associated with religious activity. As a result, youngsters who aspired to monastic vocations attended the schools. Boarding schools were founded in Africa to separate scholars from their pagan society (Pinto, 2019). Boarding has been shown by some authors to be beneficial. Some scholars have shown that role of parenting was halted by boarding schools boarding schools (Child, 2018). And some indicated that boarding schools were also sites where children whose parents died during the First World War were confined, as well as children whose parents were chronically ill from the same disease. Today, parents who are looking for the best education for their children are increasingly looking for boarding schools.

At this time, it is the general understanding among Malawians that boarding schools are places where people who seek a good secondary school education go and that these schools are not necessarily for those who live in rural places. Since independence, Malawi has had a strong ambition to build an education system capable of both personal fulfillment and national progress. As a result, a correlative problem occurred as the boarding school policy was established, because parents, children, and teachers could not simply choose between boarding school and day school. It was up to the government to choose whether the students would attend boarding school or day school depending on the overall score grade obtained during Standard 8 examinations.

The necessity for boarding facilities emerged as a result of two factors. To begin with, secondary schools were built in remote locations, and some students could not afford to commute from home to school. Learners were required to eat while in school to

maintain their focus on their studies. Such difficulties prompted policy makers to consider how to address these two issues. For example, in one of the day secondary schools, the school feeding program set the groundwork for boarding school. Organizations such as the Oxford Committee for Famine Relief and the Christian Service Committee are some of the organizations on record that introduced boarding facilities in some day secondary schools.

The project was important to give lunch to schoolchildren who were unable to prepare meals for themselves in their little huts. On October 6, 1970, the Oxford Committee for Famine, in collaboration with the Christian Service School Lunch Program, began distributing lunch to students. Therefore, the secondary school management decided to employ a cook and set up a makeshift kitchen. Ideally, students that were interested to be part of the project were requested to donate K5.00 every term towards breakfast and supper. Lunch was paid for 75t every term, which was subsidized. It is claimed that the government knew that not all students were selected from walkable distances, and hence difficulties of boarding and lodging could not be avoided.

To regulate boarding activities, the government instructed that each district day secondary school develop a boarding committee that would be in charge of running the boarding school. It is widely acknowledged that the government has never controlled boarding affairs in any of the district's day secondary schools. The responsibility for boarding schools was delegated to local committees, which were required to collaborate with District Councils. This is likely why boarding district day secondary schools have been linked to self-help programs in the past. It wasn't long before it was realized that the

living conditions in the huts built by the students with the help of the communities were appalling. In certain cases, the students were also expected to collect water, fetch firewood, and cook for themselves. As a result of the tasks, students found it impossible to concentrate and even do their assignments at night.

System of Public Secondary School

Several school systems have been examined in this literature study based on their structures and approaches to achieving the schools' aims and objectives. The Resource Utilization Model was used to analyze and identify structures and approaches in several Malawian secondary schools. Normally, it is difficult to compare national and international models fairly among countries (Abon, 2020). This is because each model uses a structure and curriculum that is appropriate for the country. Government secondary schools, according to Malawi's government, are those secondary schools that rely completely on government financial and technical support and whose buildings and property are owned by the government. The Ministry of Finance pays for every school activity, including boarding, at a government national secondary school, thus students are expected to pay minor contribution fees, which are now K19, 000 per student.

Malawi had only four national government secondary schools after obtaining independence and becoming a republic in 1964 and 1966, respectively. Mzuzu Government Secondary School, Blantyre Secondary School, Dedza Government Secondary School, and Lilongwe Girls Secondary School are the national government boarding secondary schools. There are Malawi's most prestigious national schools.

These schools are unusual in that they provide distinct disciplines that are not available in other secondary school types.

For instance, Additional Mathematics, French, Latin, Home Economics, Metal Work, and Wood Work are just a few examples of the unique programs offered in such schools. Moreover, because they had the necessary science facilities, the schools previously provided pure science disciplines. The Ministry of Education, Science, and Technology, however, began implementing a new curriculum in all subject areas on September 9, 2015, except when facilities for a particular topic were not available. The adjustment was made to give students with high-quality, relevant education.

The majority of these schools are single-gender church schools. St Mary's Girls Secondary School in Karonga, for example, is one of numerous Catholic Grant-Aided Secondary Schools managed by the Catholic Diocese of Karonga. With a capacity of 600 pupils, it offers three streams of education. This is Malawi's largest girls' national secondary school so far. There are 12 classrooms, an administration building, two scientific laboratories, a multipurpose hall, a kitchen, and a library block at the school. While the exceptional school does not yet have a computer lab or a home economics lab because it is still in its early stages, other girls' grant-aided secondary schools have. There are 16 residences for teachers in addition to 10 technical staff houses. For the girls, there are six residence halls.

With this definition, grant-aided schools and government national secondary schools are considered the best tier group of schools. On behalf of the Catholic Church and the Malawi Council of Churches, the Association of Christian Educators in Malawi

coordinates church schools. As a result, each church can work together with the government to provide quality girls' secondary school education across the nation. These schools, for example, provided Bible Knowledge, French, and Home Economics, among other subjects. According to an agreement between the churches and the government, grant-aided schools receive government funds known as Other Related Transaction (ORT). The current ORT for a single stream school is MK42, 500 per month, MK82, 500 for a double stream school, and MK122, 500 for a triple stream school. In a grant-aided school, the government pays for teachers' wages and other resources while ensuring that tuition does not rise to the level of a solely private school.

These are secondary schools that were built with both boys' and girls' boarding facilities in mind; thus, they are co-educational. District boarding secondary schools are divided into two categories at first. The first is the district secondary schools, which have boarding facilities for both boys and girls. The district secondary schools, which solely have residential facilities for boys, are the other group. The goal of the government was to have at least two district boarding secondary schools in each district. Some of today's district boarding schools began as government day secondary schools before being transformed into district boarding facilities secondary schools. The majority of these institutions began with two streams in grades one and two, as well as a night school. Even though most of the institutions were labeled as day secondary schools. The majority of the students, in partnership with local communities, arranged for boarders to live within commuting distance of the school.

In 1982, under the auspices of the International Development Agency (IDA) and the World Bank, some of these day secondary schools underwent an extension program that included the addition of extra classrooms, labs, a library, girls' hostels, a water supply system, and electricity. The majority of these improvised boys' boarding schools began accepting girls as early as 1984, and some as early as 1990.

These were miniature secondary schools that were meant to be built in each of Malawi's districts to reach learners wherever they were. The goal was to lessen the distance students had to travel to get to secondary school and to enhance fair access to secondary education. They were intended to supplement national residential secondary schools, which could only accept a limited number of primary school graduates. The goal of these schools was to reduce reliance on boarding schools. Even though Malawi had a dispersed population at the time of independence, the size of a district's population was not taken into account when building day secondary schools. A district day secondary school's infrastructure includes at least eight teachers' homes, one administration building, one scientific laboratory, and eight classrooms. The library, dorms, kitchen, and dining hall were all noticeably absent. It was the responsibility of the school administration to improvise storerooms, libraries, and hostels in partnership with the school community. This could explain why these schools' constructions and designs were not standard and regular. Each society built structures and designs according to its preferences. Initially, these schools did not provide Physical Science and Biology as pure sciences but instead offered General Science, which combined some elements from both disciplines. That could also explain why secondary school only had one Science laboratory. We

believe it is fairly justified that a district secondary school's failure to offer pure science topics hampered students' job options.

After only four years from 1994, the government extended the secondary school system by converting Distance Education Centers into lower-cost Community Day Secondary Schools, creating a second tier of secondary schools. This was done as part of the secondary unification policy of 1999. It was a radical move to improve secondary school education access. The goal was to allow students to commute from home as a way of reducing competition for boarding school spots. Community schools, according to Maier, Lam, and Oakes (2017), have a history dating back to the African American quest for a decent education. As a result of the Great Depression of 1929, community schools arose as a result of financial disparity and domiciliary prejudice.

In this regard, community schools provided an opportunity for children to gain access to resources as well as learning opportunities and educational support to combat illness and poverty. The Malawi government's overall objective was to reduce poverty. The goal of community schools was to improve learning and achieve the policy's goal. Quality education had to be provided to the students for this to be done. The goal of the community schools' strategy was to build good schools that would improve educational quality, particularly for impoverished students living in underserved areas.

Even though CDSSs were created to aid in the battle against poverty, research has revealed that they fall short in several areas. According to the conclusions of the study, resources such as flowing water and staff are essential. Running water, staff quarters, computers/laptops, whiteboards, multimedia, internet resources, radio, tape recorder,

televisions, and other things make teaching and learning less effective as they are scarcely available in community secondary schools. According to MESA (2019), CDSSs had a shortfall of 1,256 additional classrooms, compared to 170 additional classrooms required in the other secondary school types.

However, according to Chipala et al. (2016), Community Day Secondary Schools are born out of community ambitions, and hence the majority of these schools are mostly funded by school committees in addition to modest government money for day-to-day operating costs and staff wages. The majority of the supporting employees, such as watchmen and cleaners, are hired by communities and paid with monies from the supplied communities.

There is proof that parents and guardians are willing to devote time and resources to a favored school (West & Hind, 2016). In Malawi, however, parents and guardians do not have an option; the government selects students for public schools, except for those who choose private secondary institutions. Students in class one of all national secondary schools are chosen on merit by the Ministry of Education. In essence, schools choose which students to admit based on the candidate's test performance. We believe that the majority of standard eight candidates who are rejected from residential schools are disappointed. In the 2019/20 academic year, 282,428 pupils sat for the Primary School Leaving Certificate Examinations (PSLCE). Only 218,756 of these students passed the exams and were eligible for admission to one of the 82,072 secondary schools in the country (MoEST, 2019).

All standard eight candidates who have completed national examinations are rated according to gender and districts under the merit-based selection system. Then each district is given a quota, which is a percentage of candidates in that district compared to the total number of candidates in the country. National institutions and Grant-Aided secondary schools accept the highest-ranking students. Candidates in the second and third places are considered for positions in District Secondary Schools (DSSs) and Community Day Secondary Schools (CDSSs), respectively. Boys and girls are ranked separately for gender equity considerations to avoid offering more places to boys than to girls.

In general, a typical and formal selection method entails computing a maximum of 100 points in the five subjects written at the Standard eight examination to provide a sum of the best subjects for a single grade that will be used to identify individuals who will be selected. Because there are only 25 National Secondary Schools, four of which are government-run and the remaining 21 are grant-aided, secondary school access has remained a challenge. Seven are in the Northern Region of Malawi, ten in the Central Region of Malawi, and eight in the Southern Region of Malawi, according to their distribution. Because of the prestige and resources available in these schools, every candidate would want to secure a place at a national secondary school. This is usually a difficult problem. To solve the challenge, students are chosen based on their closeness. Learners are sent to adjacent National Secondary Schools in that region as much as practicable. Learners' travel expenditures are considerably reduced as a result of this.

The Ministry of Education has a vested interest in ensuring that pupils who come from remote and rural areas do not report late for class or do not miss class because they have been selected to far away secondary schools. The government has always utilized a single examination to assign students to secondary school. Some academics have advocated for the implementation of the Secondary School Entrance Examination in place of this criterion. One of the issues with a single exam is that it just looks at subject-matter knowledge, as opposed to an entrance exam that looks at learners' aptitude. Because of its possible limitations in facilitating the learning process, several authors have criticized the use of a single exam in selecting learners for secondary education. Competition is fierce during primary school examinations, forcing parents and guardians to do everything they can to help their children succeed.

Due to the fact that information obtained from exams is used for a number of objectives, exams play a crucial function in the educational system. Data gathered from exams is used to make important decisions like selection, placement, and evaluating a program of study's instructional effectiveness. Numerous studies have demonstrated that exams have an impact on the teaching and learning process, and that this impact can either be positive or negative. It is crucial to assess the washback effect to see how it affects the standard of teaching and learning that takes place in classrooms. And this study attempts to achieve exactly just that.

In a study presented by Mopag (2021), the author provided evidence that the Primary School Leaving Examinations in Botswana's format and content had an examination washback effect on the teaching process. To get the teachers' thoughts on

how much final examinations affect topic selection, content covering, teaching methods, and classroom activities, a questionnaire with quantitative and qualitative questions was employed. The majority of the teachers tend to support the existence of a bad washback impact. The apparent detrimental washback impact on the curriculum makes it difficult for Botswana to successfully adopt the criterion reference testing system.

To ensure that their children have a possibility of being accepted into a secondary school, parents and guardians spend a lot of money on study materials and other school requirements. Currently, elementary schools hold afternoon and evening lessons to prepare standard eight students for their exams. Self-boarding is encouraged in other schools for students who live far away from their institutions. These self-boarding schools are not recognized by the government. As a result, the housing conditions are deplorable, posing a significant risk to the students. Additionally, teachers do not monitor and supervise activities in self-boarding schools, which poses a concern to the parents and government. There is evidence that many boys and girls leave their homes to rent in surrounding communities to attend schools with a high secondary school rating. During the vacations, some primary schools have been observed to extend the instruction of standard eight classes. The problem is that head teachers believe that they do not have enough time to prepare the learners for examinations and therefore they extend learning time.

The issue with these additional teaching hours for teachers is that they do not receive additional money from the government, and as a result, some teachers and school officials abuse the students. Learners are occasionally requested to perform tasks such as

getting water, gathering firewood and poles, and thatching grass for teachers to use. In addition, as part of their preparation for the national test, students are subjected to a large number of questions ranging from class quizzes, weekends, end of subjects, end of term, school level mock examinations, cluster examinations, and district zone mock examinations. It is believed that too much testing, provides less time for true teaching and learning for knowledge. Furthermore, there appears to be little evidence that spending more time on examinations improves students' academic performance. The disparity between affluent and poor is widened by the rating of a single standard eighth grade for secondary school selection.

Unlike poor families, wealthy families are more likely to send their children to the best educational institutions. Most public secondary schools in Malawi are underresourced, forcing many parents to enroll their children in private schools. Currently, one out of every five secondary school students in Malawi enrolls in a private school (EMIS, 2016). Because there is no guiding strategy for the provision of education, the 2015/16 Education Sector Performance Report demonstrates that more learners attend private primary schools and that some schools function with inferior infrastructure (MoEST, 2016) While acknowledging the need for fierce competition in the selection process, it is argued that the process should accomplish justice and fairness, which can be true when additional assessment elements are taken into account.

Another issue is that a single examination grade is unreliable and does not accurately reflect a candidate's knowledge (Maddoly, 2016). Furthermore, it is argued that schools must recognize that any academic achievement is the result of a

combination of several areas of learning. As a result, focusing solely on knowledge acquisition may be deceptive and unjust to learners. Students in standard eight work extra hard to improve their grades to gain entrance to secondary school. However, because the selection is utilized to achieve standards and educational goals, it is suggested that the process should not be focused solely on a single conclusive examination. It has been determined that the selection procedure should have begun with the other primary assessments and spread throughout the primary school years. However, some have suggested that the selection process would be jeopardized due to a lack of objectivity and honesty.

The de-boarding policy, according to the Ministry of Education, meant that schools established in 2000 did not provide boarding facilities. The implication of this was that it encouraged applications for boarding places in existing boarding schools, which resulted in overcrowding and high indiscipline in the majority of boarding schools. Even though this admission policy had been in place since independence, it was being misrepresented and thus misinterpreted, particularly after 2000.

Following the 1999 Secondary Unification Policy, which converted all Distance Education Centers to Community Day Secondary Schools, it is assumed that policy direction broadened significantly. The Ministry of Education believes that the majority of students desired boarding school placements. The correct interpretation was that admission referred to the process in which the Ministry of Education delegated authority to EDM at each Education Division Office to admit applicants. Initially, these were students

who passed the PSCLE but were not accepted into secondary schools due to a lack of space.

The procedures and guidelines of the policy were clear in that admission was to be implemented in Community Day Secondary Schools rather than Convectional or National Secondary Schools to absorb the majority of equally deserving learners into the secondary school system. It should be noted that admission of learners via application letters was done at the discretion of the Ministry of Education, and thus it was not a right to be admitted. As a result of the haphazard implementation of the admission policy, the Ministry of Education was put under unnecessary pressure to admit students to the majority of public government boarding schools.

It was also discovered that some of the admitted students were not deserving students and would not have been selected into the schools in the first place. This increased incidence of indiscipline because some of the admitted students had previously been suspended from other schools. The policy implementation appeared to indicate a failure to follow quality assurance procedures, which must have contributed to poor secondary education. In response, the Ministry of Education issued a statement informing the public that, beginning with the 2014/15 academic year, admission to public secondary schools would be restricted. As is customary, such a government pronouncement was not well received by some quarters; however, that must have put a stop to the policy's abuse.

While a secondary school policy on school categorization or differentiation is important, as discussed by several authors, research findings show that school type as

a result of school differentiation affects learners' achievement (Cansiz Çolakoğlu & Ozbaylanlı, 2019). Now that parents and kids are aware of the advantages of attending a boarding school, most of them are motivated to look for one. Empirical support is provided by a qualitative study on the advantages and disadvantages of boarding schools in Australia conducted by Cooper, Gray, Gringart, Jan, Kessaris, Macdonald, Martin, 2018). In Western Australia, the study's emphasis was on indigenous secondary students and school administrators. The study's findings suggest that boarding schools are essential because they raise children's chances of succeeding in school. In comparison to students' homes or local communities, additional studies revealed that boarding schools offer more secure environment for students. Furthermore both students and school leaders agreed that using boarding facilities was beneficial for the students, especially those who come from far-away places.

These findings are also supported by evidence that boarding schools provide a variety of learning opportunities to match the learners' diverse learning abilities. Furthermore, boarding schools are known for their extensive and comprehensive lessons that are closely monitored and supervised.

While the boarding school model is lauded for being the best option due to the benefits it provides to students, there are also negative effects observed in the process. Mwangi and Mbogo (2018) support the idea by citing examples from Kenya, where it was discovered that some students complained about poor diet, poor medical attention when they were sick, hostile caregivers, and bullying by older members of the school. The scenario is reminiscent of the vices recorded at the beginning of boarding schools in

America when Native children were forced to attend boarding schools to be turned into Americans.

Bernal, Mittage, and Qureshi (2016) state that there is more evidence on how school types influence student success. For example, most studies that have analyzed the effect of school quality used class size, teacher characteristics, and overheads per capita on learner outcomes. Others have argued that that caliber of teachers is also affected by the type of school, with poor schools attracting poor teachers who are not specialized and cannot teach specialized subjects. In Malawi, for example, CDSS does not have as many teachers who are specialized in teaching most science subjects as National Boarding Schools and District Boarding Schools. These findings are reported in an investigation into the causes of poor performance in Physical Science in the ten CDSSs sampled in Lilongwe Rural. The data analyzed showed poor results came from unapproved CDSS, followed by approved Community Day Secondary Schools. Furthermore, the Physical Science results remained poor particularly in CDSS when compared with either the Day secondary School or District Boarding Secondary School.

From a study by Limon (2016), it can be deduced that school facilities determine the type of school model. Therefore, a school model impacts levels of educational attainment and completion rate, and these in turn impact on learner's career after school. The purpose of the study by Limon (2016) was to establish whether the quality of school facilities has an impact on learners' accomplishments relating to Technology and Livelihood Education using a mixed approach. Data was collected from heads of departments and instructors using questionnaires and interviews. More data were also

gathered from anecdotal records. An independent z-test was used in the study to determine differences in achievement before and after the acquisition and deployment of new school materials.

The findings revealed that there was a significant increase in learners' achievement in 2010-2011 following the acquisition and utilization of new facilities, whereas 2009 to 2010 showed the least increase in learners' achievement. Limon's (2016) findings appear to confirm that inadequate school facilities hurt students' achievement. It is in response to this confirmation that school authorities are taking significant steps to address such educational challenges. Given that school quality has a greater impact on girls' school attainment than boys' school attainment there is an urgent need for policymakers and the government to develop more effective interventions.

The Factory Model of Education

This section looks at the existing factory model education and how the education model has informed the some of the policies that have existed till to date. And to do that, there is need to look at what is necessary and unnecessary everything in the school systems. This includes every aspects that develop skills that students can take with them for the rest of their lives, versus facts they need to know for the test. The goal of this research is to understand how girls in boys boarding facilities schools perform during national examinations and suggest the best the alternative education model to suitable for the 21st century. In order to accomplish these goals for the research used interviews,

questionnaires, focus group discussion and statistical national examination records were used to collect data.

Literature shows that despite numerous efforts among educational institutions around the nation, little progress has been made in bridging the achievement gap (Robinson, 2016). The statistically significant difference in average test scores among learners from various socioeconomic or racial/ethnic groups is referred to as the achievement gap. Educational leaders are therefore argued to implement personalized approaches to support student learning rather than sticking to the assumptions that all students learn in the same way and at the same rate. This model is most applicable when improving academic performance among students that are grouped according to their test scores if they experience lower academic performance.

The teaching factory model, according to Rohmah, Sari, and Wulansari (2019), is a learning concept used in a practical setting to close the competency gap between the knowledge offered by the school and the needs of business. A learning strategy called "teaching factory" is focused on business and production. Students can learn directly from real activities with the help of instructors or knowledgeable technicians from the businesses or industrial world involved. According to Firdausy, Setyaningsih, and Waluyo (2019), two factors originate from the teacher: the tactics or learning methods employed and the teacher's level of readiness to grasp the subject matter.

The teaching factory concept is considered to have been used because three things were true: the standard learning was insufficient; students benefited from the experience of direct practice; and experience, team-based learning involving students,

teaching staff, and industry participation enrich the educational process and offer concrete benefits to all parties (Diwangkoro & Soenarto, 2020). This involves incorporating real-world job experience into the curriculum, which calls for resources and equipment for the classroom that are optimized for the best results. This means that in order to successfully implement teaching factory model, the school must have a sufficient and well-designated infrastructure such as laboratories, libraries and study rooms in addition to hostels and classrooms.

It appears that countries in early 1900s adopted factory model program for a number of reasons. First of all, it has the ability to close the knowledge gap that exists between what schools teach and what the workforce needs. This was especially important during the industrial revolution. This suggests that the model's purpose is to improve students' employability in businesses and other workplaces while also enhancing their knowledge, skills, attitudes, and character so they can better adapt to the working environment. The findings of Dewi and Sudira also confirm that the teaching factory contributes to students' preparation for the workforce (Dewi & Sudira, 2016).

The teaching factory model can help learners develop their sense of initiative. Students are taught how to be entrepreneurs through the use of factory-based activities, with the help of academics who mentor and support them in order to create career chances that ultimately require them to be able to make goods that can be produced and marketed. It is implied that the factory teaching to secondary school students as well as those in vocational high schools can improve students' academic and entrepreneurial skills. The teaching factory can help students develop academic and entrepreneurial skills

including self-discipline, accountability, independence, and creativity in the creation and comprehension of new works.

The model is subject to numerous criticisms, which are highlighted here. According to critics, the concept is based on the false assumption that all students of the same age will learn the same material with the same level of assistance throughout the course of a school year and day. It does not necessarily produce students that are thoroughly prepared, motivated, and confident. Instead, a more inventive educational strategy that provides higher degrees of personalized instruction is required to produce students that are highly prepared for life after school. Therefore, the paradigm is regarded as being incredibly inequitable and perpetuating societal inequality based on race and class. The society as a whole does not require people with the same skill levels due to its extreme stratification and differentiation. Even if everyone desired to be at the top, neither the continuously shrinking middle class nor adequate room would exist for them.

Secondly, the factory model's standard curriculum is built on a White upper-middle class worldview, which restricts perspectives, information resources, and intellectual enquiry. This also bores the varied student body in schools. Sleeter and Grant (1994) conducted a thorough analysis of 47 elementary social studies, reading/language arts, science, and mathematics textbooks from the 1980s in 1991. They looked for racial and ethnic representation. They discovered that Whites tended to command the greatest attention, appear in the broadest range of roles, and dominate plots and achievements. African Americans played a smaller variety of roles and typically only received a cursory historical background, mostly in reference to slavery.

Native Americans mostly appeared in earlier times, while Asian Americans and Latinos appeared as anonymous figures on the landscape with little ethnic history or experience. Recent textbook assessments show some advancement, but only as part of a general pattern of adding "contributions" to the primarily affluent Euro-American male, hetero-normative narrative. While texts now depict African American content, such as images of racial violence against African Americans during slavery, they continue to distinguish between racism in the past and racism in the present. It actually portray racists as a small number of evil people rather than an oppressive system, and depict those who oppose racism as heroic individuals rather than as a group.

A third problem with the factory model is that it is oriented around compliance with and maintenance of the status quo, rather than social transformation, despite use of the term "reform." For example, consider grading systems many states use for schools. The main standard by which schools are graded is student test scores. In states using this system, schools located in affluent neighborhoods are most likely to receive high grades, and schools located in impoverished neighborhoods, low grades. Failing schools are required to use approved "turnaround" models, doing things such as replacing school staff, intensifying teacher professional development for standards-based teaching, contracting with tutoring companies, and so forth. In all of this, what is solidified is what Freire termed the "banking concept of education," in which students are presumed to know nothing, and are taught to consume knowledge produced by those in power. The students on whom the "banking "model falls most punitively are those in communities of color and/or poor communities.

The obstacles that are felt by schools in implementing the teaching factory include the rapid change in the world of work so that it is difficult for schools to follow. It is also the difficult to get right partners to cooperate with because the school side. There is also reported high need for funding in completing facilities and conducting activities. It is therefore, imperative that one must examine the factory model's applicability to contemporary society because some have contended that the factory model is tragically out of date in a time when innovative businesses, constantly evolving technology, and individual liberties are so highly valued. The critics have singled out lack of adaptability. lack of innovation, and lack of consideration for the levels and learning preferences of particular students as reasons for opposition. The factory approach, which places a focus on memorization and recall, discourages learners from using their critical thinking skills and natural curiosity. Instead, the model's detractors advise schools to think about alternatives like classrooms where informal discussions between students and teachers take the place of formal teacher lectures, where project-based learning triumphs over standardized testing, and where students are grouped not by grade but rather by their skill levels and areas of strength.

Girls Access to Secondary School Education

Girls' attendance and involvement in school appear to be steadily declining over time, which has a highly negative impact on completion and transition rates. Due to the different forms of limitation they experience both within and outside of schools, particularly as they get older, girls have low completion and transition rates. This implies that girls might not study as well as boys and attend school less frequently. This raises concerns

that girls won't be able to take advantage of education's benefits for professions, social standing, and personal fulfillment. From a broad perspective, the effectiveness of the educational outcomes demonstrates that more students in the Sub-Saharan region lack appropriate literacy and numeracy skills even after attending school for a number of years (Bold, Filmer, Molina, & Svensson, 2017; Adeniran, Ishaku, & Lateef, 2020).

Even though the majority of the studies indicated a dearth of adequate schools, school development rarely appeared in the reviews by Acosta and Evans (2021) as one of the best expenditures in improving student access to education. This finding overshadowed the fact that enrollment is high when there are enough school buildings. And one strategy to boost females' access to school is to make investments in school infrastructure. This is backed by Acosta and Evans and that "construction is likely a necessary condition for other interventions to work when there are insufficient schools" (p.15). Numerous studies have been conducted to assess the interventions, and they have come to the conclusion that the greatest influence on girls' educational outcomes occurs when a variety of interventions are combined to address barriers in a comprehensive manner (Molema, Wendel-Vos, Schegget, 2019); Bai, Hewston & McArthur, 2021). In order to address the variety of issues that contribute to girls' underwhelming academic performance, numerous international partners, civil society organizations, donors, and governments have developed and put into action interventions. These interventions have, however, varied in their levels of success. Typically, they concentrate on just one or two specific restrictions at a certain level of the educational system. This could be an issue since efforts that focus on limitations at

school could easily be undone by limitations that still exist at home and vice versa. This frequently happens when education initiatives that exclusively benefit girls presume, they are "gender sensitive" and ignore alternative kinds of expression of restriction. This background leads to the conclusion that in order to have a noticeable impact on the educational attainment of girls, school building may need to be supplemented with conditional monetary transfers or additional subsidies, such as free school uniforms or scholarships as discussed by Ashraf, et al. (2021). Unfortunately, when compared to other sectors, the education sector is significantly underfunded. Failure to invest in education is a failure to end poverty and resist early pregnancy, and marriage (Bajracharya, Psaki, and Sadiq, 2019, pp 11-12).

In an attempt to increase girls' access to secondary school education, the Government of Malawi prioritized secondary education as indicated in the 2017 theme of Malawi's Sustainable Development Goals. The government intended to accomplish this by ensuring that all adolescents attend school and remain in school while learning, but this is hampered by gender inequality as boys are favored more than girls at almost all educational levels. According to Mussa (2015) "the proportion of girls with a given qualification is consistently lower than that for boys among the richest and the poorest families" (p. 11).

Authors argue that because there are many obstacles, teenage girls do not have the same educational rights as teenage boys, which has often resulted in girls' low enrollment and poor performance in most developing countries. For example, MoEST (2015) found that boys (53 percent) were more likely than girls (47 percent) to enroll in

secondary schools in Malawi. Even though UNESCO (2016) reported that there are more learners enrolled in Sub-Saharan African secondary schools, this has been insignificant because the region has the lowest female enrollment. It is also claimed that teenage boys are highly regarded as achievers, a stereotype that limits the independence of teenage girls. This report raises concerns that the agenda 2030 secondary education goal may not be met. In terms of increasing participation, some proposals include to construct more schools where there are none, as well as having targeted policies for the marginalized society, and deliberately encourage girls' enrollment at all educational levels. Furthermore, the awarding of scholarships or grants and the elimination of school fees would aid in increasing enrollment (Gajigo, 2016).

Further evidence indicates that Malawi has a critical classroom shortage, with fewer than 20% of girls who complete primary school enrolling in secondary school (EMIS, 2019). Evidence from global studies appears to strongly suggest that inadequate secondary school infrastructure contributes significantly to high dropout rates, earlier sexual activities, and related ills such as high HIV prevalence, early pregnancy, early and forced marriages, and decreased economic growth (Martin, et al., 2014; UNICEF, 2014). Mwambene and Mawodza (2017) reported that a UNICEF (2015) report indicated that more female adolescents at 23.4 % were already married compared to only 2.2 percent of males in the same age group (p.21). This adds to the evidence that a large number of young girls are absent from school due to a variety of factors that must be addressed immediately.

Before the re-admission policy, a girl who became pregnant while at school was expelled because it was an act of indiscipline. Similarly, any boy found to be responsible for a girl's pregnancy was expelled from school as a means of fostering discipline. The re-admission policy aims to re-admit teen mothers who voluntarily withdrew from school due to pregnancy. Pregnancy ranks first on the list of reasons for female dropouts, according to the EMIS report 2015. As a result of dropping out of school, the girls do not gain adequate knowledge and skills that are required to change peoples' livelihoods (EMIS-2016). The 2006 policy procedures and guidelines permitted a pregnant female learner and a male learner who was responsible for the pregnancy to formally write three copies of withdrawal letters to the head teacher and then be counseled by the school counseling committee before leaving school. The head teacher would then explain to them the readmission policy and procedure to enable them to come to school after some time. When students are not guided through the procedure, they likely fail to return to the school having missed vital information for their informed decision to go back to school.

According to public opinion, the re-admission policy represents a complete paradigm shift from gender parity to gender equity programs by removing all barriers and outdated customs that fight against girls' and women's life spheres (UNESCO, 2016). Others have pointed out that the re-admission policy fails to address other issues that young girls face due to the girls' lack of assistance and a proper implementation plan that considers monitoring and assessment components (McConnell & Mupuwaliywa, 2016). Studies in Malawi and elsewhere, for instance, revealed that the main reasons why

the majority of out-of-school girls do not return to school are a lack of financial and childcare support as well as stigma (Mwanza, 2018). Additionally, research suggests that teen mother who return to school are denigrated, mocked, and humiliated by their classmates, teachers and communities (Chozan & Langa). This leads to self-isolation, absenteeism, low self-esteem, inferiority complexes, and poor concentration and grades. Girls who don't have access to educational opportunities miss out on crucial investments in their future health, which leaves them underprepared for the workforce and restricts their capacity to move up the economic ladder and take care of their families. Poor or no education feeds the cycle of gender inequality and poverty, which has detrimental effects throughout the life course. To achieve gender equality in education, policymakers place a high focus on preventing teenage pregnancies. However, if significant effort is not put into resolving teen mothers' social marginalization, the target of eliminating gender gaps in education by 2030 will be in peril. It is important to realize that inclusive education for teen mothers is advantageous for the girls and their offspring, increasing their economic potential and their contribution to their communities. The underlining principle is that withdrawal and readmission procedures are problematic if the victims are not adequately counseled at the time they are withdrawing as evidenced. A Judicial Watch assessment found that the conditional nature of the policy creates additional barriers for students who desire to return to school (Martinez & Odhiambo, 2018).

Pregnancy is thought to be the reason for 4.3 percent of student dropouts in Malawi (Ministry of Education, 2018). Girls and boys who left school because of marriage at the

equivalent rates were 7.7% and 1.6 percent, respectively (Ministry of Education, 2018). It is argued therefore, that proper intervention be made to facilitate implementation of the re-admission policy. First, the teen mothers need to be assured of access to tuition and other educational supplies where possible. There is also an emphasis of the importance of creating and enforcing community bylaws about parenting teenagers' return to school. More important also is the need for programs that encourage adolescent mothers to re-enroll in school and advocate for girls' rights to education and the need to complete education for future independence. Lastly, a few individuals emphasized the necessity of childcare assistance.

Furthermore, some members of the public have raised concerns that the Ministry of Education appears to have taken insufficient steps to address concerns about sexuality and reproductive health among the youth. These limits make it difficult to contain the problem, and girls are at a higher risk of adolescent pregnancy and early marriage as a result of the missing information to the students. In 2019, for example, 2,818 young moms across the country were readmitted to secondary schools (EMIS, 2019). This only emphasizes the importance of seriously addressing issues of sexuality and reproductive activity among secondary school girls. However, the Ministry of Education has not yet taken drastic measures since concerns such as supplying contraceptives to Malawian adolescents in primary and secondary schools have proven to be even more difficult because the practice has not yet been included in school management practices. Given the church's view of this as a sinful existence and cultures taboo status, it is challenging

to implement any birth control programs among school-going girls and boys from both a cultural and theological perspective.

Pregnancy was viewed as "misbehavior" and an "offense against morality" in Tanzania under the 2002 Education Regulations, both of which were grounds for expulsion. However, there was a lawsuit which paved way for the new policy enthused by Human Rights Watch, which urged the president to order all school administrators and principals to allow pregnant females to return to class right away. Furthermore, it was stated that asking the girls to delay until after delivery would merely prevent them from receiving an education

Another option for removing school fees for disadvantaged females is to provide scholarships to certain groups of students (Gijigo, 2016). CAMFED (Campaign for Female Education in Malawi) aims to satisfy the educational requirements of vulnerable children, particularly girls, by providing financial assistance, protection, and advocating good governance efforts. Zimbabwe, Tanzania, Ghana, and Zambia have all had success with the program. In Malawi, CAMFED was first implemented in 2009. CAMFED had already established itself in 629 classrooms across 17 districts in Malawi by 2015 and 450,824 pupils were assisted to finish their education. Furthermore, girls who received CAMFED business training and grants were able to start or grow a business shortly after graduating from secondary school. CAMFED aims at improving females' access to education for the betterment of society since its foundation in 1993. In 2013, the first cohort of beneficiaries finished their secondary school. CAMFED funds are distributed based on the learners' recognized requirements and are hence not subject

to academic supremacy. CAMFED employs community leaders to identify beneficiaries based on characteristics such as poverty levels, the degree of impairment, the family or clan's demographic condition, and other cultural considerations.

The way CAMFED activities are carried out in Malawi appears to be different from the Girls' Scholarship Program in Kenya. The recipients in Kenya are chosen based on the cumulative test results of the females in the district. The approach appears to have aided in the improvement of both girls' and boys' test scores. This is not the case in Malawi, where CAMFED beneficiaries are not selected based on examination scores, and as a result, some beneficiaries quit out owing to poor performance. The use of test scores is thought to encourage girls to work hard and compete with one another. On the one hand, the approach in Malawi, which does not select recipients based on test scores, is seen as a contributing cause to females' laxity in their studies, but on the other hand, it can be argued that the procedure attempts to distribute school support evenly.

In the 2015/16 academic year, the Malawian government increased secondary school fees in all public schools from K500 to K3, 000, increased the textbook revolving fund from K250 to K3, 000, increased general-purpose fund from K500 to K2,000, and harmonized the development fund from K500 to K2,000 per term. Even though the Ministry of Education does not have complete authority over district boarding schools, boarding fees were set at K35,000 to K40,000.

The Ministry of Education, on the other hand, increased the national government boarding school's boarding costs from K1, 500 to K25, 000 per student. Malawi's tuition fee abolition policy was based on various study findings that identified fees as educational

expenditures that prevented girls from pursuing secondary school education. The policy was adopted to promote access and improve learner efficiency. Although it was anticipated that eliminating school fees would increase enrollments, Malawi's primary school system, where charges have been eliminated for a while, is still in a state of low development (Zubairi & Rose, 2018). It is assumed that the elimination of fees does not appear to increase demand for education among girls and women because there are other educational costs that students are reported to suffer in the earlier research. And this requires careful planning to prevent lowering quality, which would deter more girls from enrolling in school.

From a human rights perspective, the right to education must be protected and executed, and Malawi, like other nations, has endeavored to do so by putting into place a number of project initiatives to make secondary school education more accessible to females. One of the many important challenges that females encounter is being attempted to be addressed by the re-admissions policy. The early marriages that lead to school drop-out are addressed by this re-admissions policy. The right of girls to an education is one of the socioeconomic issues being addressed by the policies on targeted fee elimination, re-admission, and the CAMFED projects. Malawi must enhance females' access to high school education through concerted government and non-governmental efforts if it is to meet its national educational goals.

In TA Liwonde in the Machinga region, Munthali, Kusters, Kakal and Kok (2021) conducted a baseline study to examine child marriage and teenage pregnancies as part of the Yes, I Do program. The was program created and put into action a number of context-specific

interventions between 2016 and 2020 with the goal of lowering teen and child pregnancies. The midline survey discovered that while informants believed that child marriage was becoming less common, the rate of teenage pregnancies was rising. According to the regulations, girls were not permitted to get married if they became pregnant (Munthali & Kok, 2018). The percentage of young women between the ages of 18 and 24 who were married or in a union before turning 18 increased from 18 percent at baseline to 20 percent at the end of the study in TA Liwonde. The percentage of child marriage increased from 23% to 28% in TA Chikwewo, the control area. Even though the control area had a higher increase in the prevalence of child marriage than the intervention area, the trends over time in both areas were not statistically significant. The rate of child marriage did not dramatically vary over time. From 63 percent at baseline to 70 percent at end-line, the proportion of young women (20-24 years) who had their first child under the age of 20 increased. In TA Liwonde, it rose from 65 percent at baseline to 76 percent at end-line, whereas in the control region, it decreased and this latter increase over time was statistically significant, but the difference in trends over time was not. At baseline, nine male respondents had given birth to their first child before the age of 20, but by end-line, only eight male respondents had done so.

On the international scene, the Beijing Conference noted that females were far from being free of discrimination and far from gaining their full rights, especially adolescent and marginalized girls. Given the fact that girls' needs, preferences, and vulnerabilities are distinct, the Beijing Platform for Action made several declarations. One of the declarations was for governments to remove discriminatory laws and adopt laws that

promote gender equality to enable increased girls' enrolment in primary and secondary education. The Beijing Platform for Action's success story is that girls' lives have gradually improved over the last 25 years since the Platform's adoption.

Despite the above-mentioned successes, it appears there are gaps in achieving the Beijing Platform's commitments. In terms of girls' access to primary and secondary school, there has been significant progress. However, it appears that the girls from the poorest families, as well as those from war and volatile backgrounds, have not reaped the benefits of Beijing's much-touted success. One of the main points of the Beijing Platform for Action was that the major cause of poverty for women is a lack of access to education. The Platform then stressed the significance of unleashing women's productive potential through a purposeful policy of providing women with free access to information to boost their productivity, especially in developing nations. It is only addressing socio-economic gender inequities that can lead to the significance of investing in both formal and nonformal education and training. The Platform emphasized the importance of investing in both formal and non-formal education for long-term development and economic prosperity. As a result, several essential initiatives were advised, including lowering female illiteracy, integrating literacy and numeracy programs for out-of-school girls, and encouraging women and girls to pursue lifelong education and training. All this points to the notion that investing in girls' education is a big deal. According to the World Bank (2018), investing in girls' education will enable them to achieve better health, higher earnings, and more control over their lives, which will have a positive impact not only on their families, but also on their communities, and societies. It's also worth noting that

better education for both girls and boys leads to higher economic growth, labor productivity, and social mobility (Evans & Yuan, 2019).

To improve the educational achievements for girls, countries have concentrated on initiatives primarily geared toward them, such as girls' latrines and scholarships. Evans and Yuan (2019) examined the outcomes of 270 educational interventions from 177 studies conducted in 54 low- and middle-income nations, regardless of whether the programs were specifically targeted at girls. The three investigational issues were as follows; what are the most effective interventions for girls in absolute terms; are girl-targeted therapies more beneficial for the outcomes of girls than general interventions; do wide, non-targeted interventions have stronger benefits on girls.

To address the aforementioned study problems, a sizable database of educational studies with access or learning results for students was reexamined. General interventions and specifically targeted interventions were the two groups into which the research was split. While parent-school management meetings are a broad intervention, building restrooms specifically for women is a focused, specialized intervention for girls. For instance, the broad intervention that included parent-teacher conferences improved females' learning more than the girl-specific merit scholarship program. According to the authors' findings, generic therapies are more likely to help girls access and learn than treatments that are more narrowly targeted. It was not understood, however, that girl-targeted treatments are most successful when they address difficulties unique to females, for instance, an intervention to enhance learning for girls entails enhancing teacher pedagogy. Scholarships for high-achieving girls, for example, are specifically

focused interventions for females that have proven to be helpful. The study appears to suggest that general intervention, operates similarly to girl-targeted treatments in increasing both girls' access to school and their learning outcomes. In the study, a general intervention was defined as one that did not address male or female gender in its design, resulting in a gender-neutral program. When analyzing the best and least successful strategies for girls' education, Evans and Yuan (2019) appear to contradict the conclusions of this study. Girls' access to school was more responsive to changes in costs, distance, and health conditions, according to the two authors' statistical findings, and girls' learning was more likely to be enhanced by structured pedagogy and interventions that help teachers teach at the appropriate level. There is little evidence, however, that some initiatives might benefit from a gender perspective in the design and execution of the suggested interventions. The investigation by the two authors had a significant study restriction in that it was limited to only the therapies that were investigated. This made generalization difficult because more girl-targeted interventions were not tried, and others that were tried were not properly evaluated enough to be reported.

In the end, focused girls' intervention comprised initiatives that gave cash or in-kind transfers to girls, lowered tuition or other school costs for females, offered girls educational opportunities (merit) scholarships for girls, the construction of latrines in schools for girls, and the reduction of travel distance to schools for girls supplying female teachers, or constructing rural schools or providing transportation for girls. Girls' empowerment programs should be implemented in schools. Evans and Yuan (2019, p.

2) conclude that "if policymakers want to help girls learn, they can make schools better for all children".

Understanding Inclusive Education in The Context of Girl's Education

A brief overview illustrates that there are different perspectives and practices in the implementation of inclusive education worldwide. The reason is that each of the researchers, policy makers, and educationists understand inclusive education in different ways (Haug, 2017; Van Mieghem et al., 2018). Through its own understanding, Malawi developed the National Inclusive Education Strategy that resonates with the inclusive education policy statement of the 2016 National Education policy. The policy aims at putting a plan of action to achieve increased access to equitable and relevant quality education for all learners in Malawi. The National Education Policy recognizes the importance of promoting inclusive education in the education sector. This literature study examines inclusive education (IE) in Malawi, with a particular focus on female learners as day scholars at boys boarding facilities schools as a model of inclusive education. The study considers girls boarding facilities as very important school infrastructure in inclusive education. This school infrastructure includes classrooms, sanitation facilities, play grounds and water points. This takes cognizant that several research studies have shown that school infrastructure has direct impact on access, quality and equity of education.

The section starts the review by examining several definitions of inclusive education. For instance, Prajapati and Sighn (2021) defined inclusive education as "an educational set-up where children with diverse learning needs are accommodated in the general classroom and have equitable quality opportunities" (p. 111). Sharma (2021)

ascribed that "Inclusion is the full-time placement of children with disability whether mild, moderate and severe in a regular classroom with the normal children (p. 1). The two authors above seem to emphasize that inclusive education ensures that all learners irrespective of their state of disability learn together with normal learners in schools. It is undisputable that all learners have a right to assume the best possible learning environment, therefore, learners with special needs should not be excluded from school. The two definitions above restrict the definitions to learners with disabilities whilst in essence the case for inclusivity does not have to be limited to including learners with disabilities in general education classrooms. This implies that effective inclusive education models must benefit all students, not just those with disabilities. As a result, education believe that every student, disabled or not, should be allowed to succeed. The National Strategy on Inclusive Education (2017-2021) in Malawi gives a broad overview of inclusive education, identifying all barriers to girls' secondary school access and learning with the aid of everyone. There have been arguments in Estonia that inclusive education is just one of the mere ideologies because its implementation processes fail to take into account the actual circumstances of the learners' reality. However, there two opposing discourses regarding inclusive education which are to be presented in this section. From one front, inclusive education was considered in terms of inclusion of some, Arcidiacono, Bauca and Leijen, (2021) argued through a report by Ehala (2020) that 80% of the learners' knowledge and skills were influenced by individual's abilities and the home background whilst only 20% were influenced by the schools they attended. From the other front, inclusive education was taken as inclusion for all. This is in contrast to inclusion for some

arguing "that all children in a society should have an equal right to get adequate opportunities to develop wellbeing, agency, identities, and competences in order to become capable to participate fully and equally in the society" (p.3). It is further contended that inclusive education cannot be achieved if some of the learners are educated in a segregated context. In my view, I look at girls in boys boarding facilities as learning in a segregated learning environments due to absence of girls boarding facilities. From the literature, it can be argued that leaning environment such as boys boarding facilities schools, the girls neither develop a sense of belonging nor become full integrated members of the school because of marginalized status and limited opportunities to stay with other learners (Koller et al., 2018). The emphasis about inclusive education is that there should an equal opportunity for all leaners to be educated in regular education that have conditions, capacities, and resources to be ably used by all learners without excluding others. It is also further argued that inclusive education would have been attained if the learners were coming from similar child care and family values citing the fact that "inclusive education is a mirage created by our sense of justice, but its implementation puts young in a learning environment that is not in line with their home preparations and development needs" (p.2). In this paper, there is justification to call boys boarding facilities schools as not practicing inclusive education from the fact that "other writers have been given meanings that are globally recognized, while others are interpreted differently based on the varying reasons and factors affecting them, including religion and regions, history, values, race, and resource limitations" (Namanyane & Shaoan, 2021, p. 1). In order for Malawi to successfully implement inclusive education,

as advised by UNICEF (2017), it is necessary to take into account changing the entire educational system, including legislation and policy, systems for financing, administration, design, delivery, and monitoring of education, as well as the structure of schools. This recommendation from UNICEF (2017) is in line with the assertion made by Namanyane and Shaoan in 2021, who noted that the idea of inclusion became a part of a global initiative for education reform that demanded that children with disabilities fully participate in regular education beginning in the year 1980. Therefore, it is suggested that inclusive education should offer both academic and extracurricular programs that are specifically designed to suit the requirements of all students, including those with special needs. An illustration is given from Lesotho, a nation in Southern Africa, where the Ministry of Education Science and Technology has policies in place to ensure that students from low-income families, children with disabilities, and orphans have access to high-quality education and that the state pays for tuition and other school expenses.

For a study that looked at teachers' opinions of the curriculum, the physical environment, and their preparation for the inclusive education program in Ghana, Deku and Vanderpuye (2017) used questionnaires to collect information from 120 teachers at inclusive schools. One condition for a school to be considered inclusive was the availability of hostel support for the blind at schools for the deaf. The study's conclusions seem to suggest that inclusive education is not supported by the characteristics of the teachers, the school's environment, or the curriculum. This meant that inclusive education in Ghana was defined by the presence of qualified teachers, a practical curriculum, and physical environments that catered to the requirements of students.

This study defines inclusive education as "the range of elements that form educational experiences and outcomes. The focus of inclusive education definitions appears to be on specific measures for disabled and disenfranchised students, rather than all children. The main idea of inclusive education policy is to address the needs of all students, whether they are disabled or not. According to a UNESCO (2020).

"In an inclusive school, all students are welcome, feel they belong, realize their potential and contribute to daily school life. Inclusive schools ensure that all students, regardless of background, ability or identity, are engaged and achieving by being present, participating and learning. However, many schools fall short, including in terms of gender inclusion, for reasons ranging from poor infrastructure to unsafe learning environments" (p. 51)

Students with visual impairments reported being unable to continue their education after completing elementary and secondary school, per a Malaysian study by Elnour and Saad (2020), which supports the UNESCO (2020) report on inclusive schools. This is due to a lack of possibilities for students to utilize educational resources provided by their institutions. For instance, visually impaired learners fail to tackle some topics in subjects like Mathematics besides Sciences because they are usually beyond the learners' physical abilities to understand. In addition, subjects like Arts are not even an option. The findings in the study are consistent with the findings that some schools in Malawi especially in boys boarding facilities, subjects like Home Economics are not offered thereby denying the girls opportunity to further their studies in the field of Home Economics. Similar study by Ahamd (2018) cited lack of readiness for the learners as reason for failure to qualify for further studies.

However, there is more research on the outcomes of inclusion for students with disabilities and less for students without disabilities in inclusive settings and this prompted

to summarize and organize the literature on the academic and social outcomes of inclusion on students without disabilities. The results indicated more social benefits of inclusion such as reduction of fear, hostility, prejudice, and discrimination as well as increase of tolerance, acceptance, and understanding (Kart; Kart, 2021). However, according to a different study done at secondary schools in Namibia, inclusive education is being impeded by lack of funding and other resources, curriculum issues, a lack of teachers with the necessary expertise, and inadequate inclusive education regulations (Mokaleng & Möwes, 2021). This therefore calls for a concerted effort and positive shift in perceptions and attitudes among those responsible for providing inclusive education. According to Mitchell, et al. (2017) and MoEST (2017) marginalized members of society such as children from the streets, children with disabilities, girls, children from racial or dialectal sections, children from frugally deprived families, children from itinerant and displaced groups, and children living with HIV/AIDS need to regarded as productive population too.

The National Strategy on Inclusive Education (NSIE) was designed by the Malawi government's Ministry of Education, Science and Technology to ensure equitable access to quality education at all levels. In fact, "the concept of inclusive education has a broader meaning and does not only refer to a single group of learners in an education system" (Ministry of Education, Science, and Technology, 2016, p. 12). On two fronts, the NSIE is a speedy response.

To begin with, it answers to the Malawi Growth Development Strategy, the National Education Strategic Plan, and the UN Convention on the Rights of the Child.

Second, NSIE aims to promote fairness, access, quality, relevance, governance, and management by responding to national education goals and objectives (MoEST, 2017). Unfortunately, this is not the case. The terrible part is that impaired students encounter numerous challenges in school, and more than 15% of women do not complete secondary school, and 42% of adolescent girls marry before the age of 18.

The Ministry of Education's coordination with FEDOMA and MACOHA, as partners who are already working with marginalized populations, is facilitated by NSIE. The Ministry of Education must provide effective policy implementation techniques, such as teacher training and creating inclusive school infrastructures, as part of the strategy.

A technique to encourage female secondary school education is to place females in boys boarding facilities secondary schools where there are no girls boarding facilities. It is ideal for learners to encourage one another rather than compete with one another in their learning process. In boys boarding facilities schools, girls are selected primarily on the availability of classroom space rather than the availability of bed space. The government picks 60 male students as boarders and 40 female students as day scholars to carry out the policy (MoEST, CWED Selection Book, 2018/19). In an ideal situation, each classroom stream would include 30 boys and 20 girls, for a total of 50 learners. Because the day schools under investigation are double stream, each class has a total intake of 100 students. According to the policy, male and female students are placed in the same school, and classroom, and are taught by the same teachers under the same conditions, according to policy.

Restructuring schools and education systems, as well as implementing educational policies that encourage inclusion, are all examples of successful inclusive education projects being carried out in Malawi. The disparity between policy and practice, on the other hand, appears to differ significantly from country to country. In Malawi, it is illegal to seek private accommodation in secondary schools, which is generally referred to as "self-boarding." The challenge with learners seeking self-boarding is that the owners of the houses where these school girls stay are unconcerned about the learners' well-being.

The lack of boarding facilities has long been a problem in Malawi, and as a result, the government allowed communities to open boarding schools in areas where they were needed. This was on the condition that the boarding school's full expenditures be borne by the parents and community. Females joined self-boarding near schools when there were no girls boarding facilities and parents did not take measures for girls' shelter. This is happening at a time when the Ministry of Education has not yet approved self-boarding for girls, but already there are unsanctioned numerous self-boarding institutions in existence. The fact remains that without having these unsanctioned self-boarding facilities, more girls would significantly be at risk of dropping out of school as a result of the lack of accommodation in Malawian secondary schools. While the Ministry of Education found most boarding schools to be expensive to run, missionaries believed that the operation of boarding schools boosted learners' examination scores. Schools established and administered by Christian missionaries are schools that have adequate

teaching and learning resources, well-qualified teaching staff, and improved infrastructure which includes well-furnished girls' hostels.

There appears to be no standard design for hostels when private partners and communities agree to assist the government in the development of hostels. Due to the lack of a standard hostel, it appears that most boarding school infrastructure in day secondary schools is not uniform and standard. Nonetheless, the Ministry of Education has recently collaborated with JICA to develop a standard hostel design. Originally, a conventional hostel had to accommodate 56 students (4 students per room x 14 rooms) and 112 students in two buildings. For the hostels that will be built in phase II, a new design was created.

To save money on construction, the hostels in Phase II were converted to a middle corridor type instead of an open corridor, with a 25% smaller footprint. Furthermore, given the scarcity of local water supply, the toilets were converted to pit latrines as ancillary facilities to conserve water and money. The restroom and ablution facilities were built as a separate block with a covered walkway connecting it to the hostel block. One of the goals of putting students in hostels is to ensure that they are carefully supervised. If houses for housemasters or matrons cannot be built, learners may continue to live in hostels but without instructor supervision. The government assumes that housemasters will be teachers who reside on campus, whether in institutional or rented housing (MoEST, 2017).

A survey conducted in Balaka in 2016 underscores the need for rigorous supervision of boarding school girls. According to a survey conducted in five community

day schools, 64 girls dropped out of school due to early pregnancies. Self-boarding students accounted for 38 of the 64 girls. The high dropout rate was linked to the girls living in leased residences and being unsupervised by the teachers. As a result, no separate housing project has been undertaken at Community Day Secondary School. The chronic teacher shortages that ultimately lead to below-average student achievement are largely attributable to this preconception and the government's reluctance to build teacher housing in rural areas. Teachers who have been assigned to such schools by the government fail to report to their new duty stations due to a lack of housing.

However, the practice of self-boarding in primary and secondary schools is in direct opposition to what occurs at post-secondary institutions. The Public-Private Partnership (PPP) Framework allows the same girls and boys who are forbidden from self -boarding in secondary schools to become self-boarders in higher education institutions. Public-Private Partnerships (PPP) is a broad strategy for procuring infrastructure services that involve the government contracting private enterprises to provide goods and services. As a result, it is suggested that the lack of adequate and cheap housing severely disadvantaged girls in secondary and post-secondary schools, as Gabriel (2016) discusses.

Inclusive education is widely recognized in the twenty-first century since it reveals the hidden potential in students. As a result of this, inclusive education has grown into a global phenomenon that is being implemented in a variety of various local contexts and interpretations. In Ghana, for example, a study by Okori (2018) discovered that when

inclusive education was adopted, teenagers became more united. The union included the disabled, students with learning disabilities, immigrants, and members of the community who were marginalized. The findings of the study underscored the importance of education in bringing people of various backgrounds together.

However, some scholars argue that Okori (2018)'s findings are misleading since they do not take into account other factors. The arguments even go so far as to imply that some disabled students may be excluded and subjected to discrimination because of unfavorable perceptions of such students and the stigma they endure. Some families and society have frequently prevented their special needs children from being seen in public by isolating them in order to avoid such negative feelings and stigma. (Adeniyi & Omigbodun, 2016). It is also very unfortunate to learn that, some teachers because they are not qualified enough to work with students who have learning difficulties, they too tend to be uncomfortable and unwilling to teach children with disabilities. According to the National Council on Disability in the United States of America (2018), many impaired students are segregated, with no additional opportunities to participate in academic or social school activities.

Furthermore, many students with disabilities are denied access to academic and extracurricular activities as well as amenities that are available to other students. Despite the lack of evidence supporting the value of a segregated special education class and school, research shows that inclusive education produces the best learning outcomes. Ndholvu (2016) agrees with the plan for implementing inclusive education, which includes instilling good and compassionate moral and ethical values. No one is left behind in any

of their life experiences because they are recognized as full human beings with rights, obligations, and responsibilities just like any other normal person. While many general education teachers appear to have a negative attitude toward inclusion education. Generally, it was found that the problem can be solved by educating teachers to become inclusion teachers. It is widely acknowledged that adequate training is the most effective means of influencing teachers' views toward inclusive education. According to Monje (2017), negative attitudes toward children with disabilities are fueled by a lack of professional development among regular classroom teachers. According to the researchers, this could be due to general education instructors' lack of training, and there is sometimes no training for teachers to be oriented on how to teach learners with impairments as earlier allude to.

In this paper, it is argued that girls' education is an integral aspect of inclusive education and that its implementation is heavily reliant on the transformation of schools and other learning environments to accommodate all students. In light of this, boys boarding facilities secondary schools may be regarded as being less inclusive than schools that provide inclusive education. In most countries, inclusive education is viewed as a method of supporting students with disabilities in regular classrooms. However, there is a widely held belief that inclusive education should be considered as a strategy in which reforms are implemented as a means of boosting support for a varied group of students.

It is stated that giving schools equal access to resources is one sure means of ensuring that all students, not just impaired students, receive an equal education (Center for Public Education, 2016). However, the lack of girls' boarding facilities suggests that females do not have access to the physical infrastructure in boys boarding facilities schools, indicating unequal access to secondary school education for girls.

According to the majority of the literature, increasing secondary school resource allocation is critical in promoting quality educational services, particularly for girls, and not just for special schools. The goal of this study is to look at inclusive education as a process that goes beyond disability-focused approaches and develops education based on human rights, which includes not only dignity but also justice, fairness, and integrity (UNESCO, 2016). As a result, the Ministry of Education emphasizes the importance of inclusive education so that all students with SNE are not excluded from quality education at all levels. This is why it is very important to plan for inclusive education to avoid sending wrong messages to learners with disabilities. According to McCain (2017), students with impairments occasionally seem to believe that something went wrong with them and that it needs to be fixed.

The persistence of such messages became internalized by learners with disabilities and this builds even more impediments to inclusive education. As part of this process, Malawi developed strategy from it understanding and perspectives concerning inclusive education. This was important because importing solutions and strategies from other nations and their school systems may not work (Haug, 2017).

According to the 2018 NSO, housing, and population census, children with one or more disabilities accounted for roughly 15-18% of the total population. This

suggests that other measures to increase girls' attendance in secondary schools must be scaled up. In an attempt to implement an inclusive education policy, the Malawi government, through the Ministry of Education, proposed some approaches such as reaching 50-50 selection benchmarks in secondary, building girls hostels, making infrastructure girl-friendly, providing bursaries to needy learners, sending female teachers as role models for girls, and other provisions.

The mention of the construction of girls' hostels, which is the subject of this research, is of particular significance. Several problems, according to the Ministry of Education, are impeding the successful implementation of inclusive education in Malawi. To begin with, there are no clear policy rules for allocating school resources to satisfy the demands for inclusive education, according to reports (MESA, 2019). Second, at all levels, there are major discrepancies in the duties and placement of SNE teachers serving students with special educational needs. Third, resource centers for supporting inclusive education are not evenly distributed across all educational zones.

From the above literature review it is very challenging for any and its educational institutions to successfully implement an advanced inclusive policies and strategies when it is in contrast to established national traditions and norms. Therefore, each nation ought to develop its own path to inclusive education depending on their context. In the Malawian context schools are thought to be inclusive if they too have boarding facilities so that learners do not stay in their homes during school days. Finally, the correct policy and guidelines are critical to the success of inclusive education. The segment looks at inclusive education from a broader perspective, where girls are

frequently viewed as weak and marginalized, and hence are largely excluded from government plans and initiatives. Deliberate policies, such as the new investment strategy and initiatives aimed at overcoming policy gaps, have been suggested to be important in educating the girl child.

Summary

This chapter offered the theoretical framework chosen for this study, as well as an overview of relevant literature as is related to persistent variables influencing academic achievement among females in secondary school and feasible interventions. This chapter discusses the low academic performance of girls on national exams as a cause for worry among parents and the government. As a result, it implies that the previously described contemporary educational system is flawed through its practice and policy that plays a key role in maintaining the inequality status quo. It is for this reason that the study considers issues of access, equity, and quality of secondary school education among girls as critical issues in educational policy and thus forms an integral part of policy and transformation debates and discussions.

The Human Capital Theory and Harper's anti-deficit achievement framework were chosen as the theoretical foundation for this study. The human capital theory was chosen for the following two reasons. To begin, educational policies are based on the human capital theory, with the expectation that educational policies will advance education goals by increasing economic growth, thereby reducing poverty. Furthermore, most countries advocated for policies that would either alleviate or completely eliminate poverty. Second, the human capital theory was well connected to the logical and

emerging empirical evidence of the relationship between education and national aspirations (Marginson, 2019).

Harper's anti-deficit achievement framework organizes research questions in order to better understand the accomplishments of underrepresented groups. The decision was based on the idea that female education in Malawi is distinguished by unique experiences derived from diverse and varied backgrounds. However, the majority of research on female education just like research on Black Males in America, portrays them as a monolithic block and focuses on deficits, which negatively influence their retention and completion of their studies (Austin, 2017). Girls who attend secondary schools in boys boarding facilities secondary schools are presented as marginalized members of the society. While much effort is being made to educate as many girls as possible, there are still more school-age children who are not in school around the world (The World Bank, UNESCO and UNICEF, 2021). Bashir et al. (2018) compiled recent data that provides a detailed descriptive analysis of the present situation of education in Africa, highlighting the fact that many children remain out of school. Lawson (2015) claims that some girls do not attend secondary school, or that their parents and guardians refuse to send them, because of concerns about the quality of service provided by the schools.

Research indicates that young girls who drop out of school may encounter gender inequity, high illiteracy rates, single parenthood, unemployment, and a range of other detrimental outcomes that have an impact on girls' development of their human capital. Implementing programs that support adolescent girls continuing their

education is therefore essential. Sampa, Musukuma, Fisa, Musonda, and Young (2021), for instance, looked into the various research that were carried out to describe and evaluate interventions for retaining adolescent girls in school in low- and middle-income countries. Since the Education for All (EFA) movement and the Millennium Development Goals (MDGs) rendered basic education free for all African citizens, there has been a greater emphasis on the need to improve secondary education in Sub-Saharan Africa (SSA). There is a significant demand for secondary education as a result of greater access to and completion of basic school. In order to compete in the job market, there is a rising need for people who are more educated and skilled. However, SSA governments encounter a variety of obstacles in achieving their objectives for secondary education. These include a lack of finance, a lack of the essential infrastructure in both urban and rural areas, a dearth of qualified and motivated educators, and the challenge of putting effective educational policies into practice (Baghdady, Omar & Zaki, 2021).

In this literature study, quality issues have been addressed from the perspective of attending a boarding school. According to some scholars, poor secondary school education is the result of insufficient school attendance, fewer study periods, or school dropout, among other factors. Abolition of school fees, as well as the construction and improvement of school infrastructure, are examples of interventions that can cause high positively influence learners to excel in their academic circles. Even if school construction is rarely mentioned in lists of the finest investments, it is necessary to establish a long-term solution when there are few schools. A program to build schools,

for example, enhanced enrolment, attendance, and student learning in countries like Burkina Faso, Niger, and Benin.

This chapter's review also underlined the need of treating girls and women equally to boys and men, because girls and women, like any other citizen, have the right to be educated and choose their lifestyles. The conversation was founded on the capacity approach, which states that actual opportunities must be provided to females for them to live the lives they desire.

Lastly, there are two main arguments put forward why it is suggested that girls needed boarding facilities secondary school. Firstly, is that there are special personality traits associated with girls staying in hostel which include being confident, punctual, social, responsible and realistic, compromising, and sharp in many aspects of life (Rafique & Waseem, 2021). Girls living in hostels learn to live with different types of people during their time and this increases their patience. Probably, this can be argued as one of the main reasons why parents and guardians would want their children to attend boarding schools. Secondly, there are additional reasons for conducting the current investigation on girls' academic performance in boys boarding facilities school based on UNESCO (2020) reports that all regions of the world have seen a significant increase in female enrolment in tertiary education, which tripled globally between 1995 and the present. Unfortunately, Sub- Saharan Africa has been an outlier, with men outnumbering women. The fact that females not only make up the majority of undergraduate students, but they are also more likely than males to complete tertiary education provides impetus to improve girls' academic performance in boys boarding facilities secondary school.

CHAPTER 3: RESEARCH METHOD

The chapter covers seven sections as follows, introduction to the section, research approach and design, population and sample of the research study, materials/instrumentation of research tools, operational definition of variables, study procedures and ethical assurances, data collection and finally chapter summary.

According to literature, literacy has been a top priority for development over the past few decades, and according to UNESCO Institute for Statistics (UIS) data from 2016, 750 million persons, two-thirds of whom were women, lacked the fundamentals of reading and writing. This demonstrates unequivocally that, even prior to the Covid-19 pandemic, there are significant obstacles to female education around the world. Girls and women have high rates of illiteracy and numeracy. The increased requirement for girls to pursue relevant secondary school education has become a significant concern to overturn the current status of the girls and women (Ileka & Massomeh, 2021). In light of this, the government, academics, and parents have discussed whether or not the government should increase funding for secondary schools that provide boys boarding arrangements. In order to advance their studies and develop personally, students prefer schools with boarding facilities more than schools without boarding arrangement (Hendrayana et al., 2019; Martin et al., 2014). However, not all secondary schools provide boarding arrangements. The government was forced to stop building new boarding schools and maintaining the current residential secondary schools due to the world economic problems that began thirty years ago. Because of this, certain secondary schools today are referred to as "boys boarding facilities schools." Girls who are chosen for secondary schools with males' residential facilities must commute from their homes

or rent space nearby because these schools lack specific girls boarding facilities. To enable females to reside on the school site, other school communities mobilized resources and built girls' hostels. However, several parents and guardians questioned the government's decision to establish exclusively boys boarding facilities schools without girl's boarding facilities. The lack of female boarding houses in schools with male boarding houses would seem to indicate that girls are still marginalized in today's society. Girls' poor academic performance is a concern with the marginalization of girls. Notwithstanding this, a recent and major comprehensive worldwide meta-analysis that compared male and female performance at all levels found that females have always outperformed boys in the classroom (Jackman & Morrain-Webb, 2019). Evidence in Malawi shows that boys regularly perform better than girls on all national exams supports this (Chimombo et al., 2014; Robertson et al. 2017). However, several studies elsewhere have revealed that girls perform better than boys (Ullah & Ullah, 2019). A close examination of study success outcomes reveals significant differences between male and female learners in terms of admissions, study options, dropout rates, retention rates, and completion rates (Jackman & Morrain-Webb 2019). In countries like Japan, Kenya and France female students in outperform in terms of academic success (MacLeod 2018; Morita et al. 2016). This is in stark contrast to the Malawian situation, which suggests that a lack of girls' boarding facilities may be to blame for the high number of female failure rates on final secondary school national examinations (MoEST 2014).

Poor performance on the Malawi School Certificate of Education examinations suggests that females do not acquire the necessary information and abilities, which makes it challenging for girls and women to successfully compete with men where there

are strong socioeconomic forces at play (Dhungana, 2020). The females also have a difficult time getting into colleges and other higher education institutions due to their subpar academic performance. Additionally, it might be challenging for girls to acquire employment without the required credentials, such as a Malawi School Certificate of Education. According to the Malawi Economic Monitor (2018), a high failure rate among girls has caused more school dropouts and child marriages, which have increased population growth due to early delivery. Heath and Jayachandran (2016, p. 10) also cite research to support the claim that "women who spend more time learning in schools frequently get closer to their desired fertility." There is strong evidence that female education levels enhance fertility rates (Doepke & Kindermann, 2016)

According to Meredith (1998), the purpose of an action case study is to "typically use multiple methods and tools for data collection from several entities in a single, natural setting that considers two learning environments without making any experimental controls or manipulations" (pp. 442-443). It is against this background information that Yin (2014), rightly defines a case study as "an empirical inquiry that explores a contemporary phenomenon in depth in its real-world context" (p. 16) There have been reports suggesting that low achievement levels in most developing countries are due to the marginalization of girls which has resulted in reduced learning opportunities between boys and girls (World Bank 2018). This research study aims to examine whether girls boarding facilities need to be provided in boys boarding facilities secondary schools by considering if there are any academic performance gaps between girls in the boarding facilities secondary and girls in the district boarding school. The objectives of this study are to understand the similarities and differences in what has value in the boys boarding

facilities secondary school and a district boarding school by teachers, educational leaders, and learners. The study further looks at the extent to which boarding facilities add value to the learning environment for the success of the learners. In this study, I argue that better solutions to improving girls' education can be found by using the Anti-Deficit Achievement Frame unlike the use of the Deficit Achievement Frame which seems to have dragged the rate of improving girls' secondary school education.

This study's research design is an action research study, which is examined using both qualitative and quantitative techniques. Making the research question as explicit as possible was the first stage in choosing the type of research instrument to utilize. A questionnaire is one of the research's instruments. According to Saunders et al. (2009), there are many different kinds of questionnaires that researchers can use to gauge the emotions of study participants. At this study, participants' perceptions of the Malawi School Certificate of Education examinations pass rate, public university selection, and whether the government should have offered girls boarding facilities in boys boarding facilities schools were assessed using research tool such as a questionnaire. Robson (2011) argued that the ease with which participants interpret standardized items in questionnaires justifies their use. It was possible to get respondents' thoughts about what they thought or felt was true or false by using questionnaires (Akinci & Saunders, 2015). The official statistical data from MANEB from 2010 to 2019 was the second study method employed to examine the academic success levels of the girls. The official data from MANEB contained the pertinent numbers required to logically and convincingly explain the research story. Statistics is a "science that deals with the collecting, organization, analysis, and making of interpretations from

the samples of the complete population," (Ali & Bashar, 2016, p. 54). In addition to other potential documentary data sources like archives, scholarly publications, and government reports, the study critically reviewed official statistics data from the Malawi National Examinations Board for the years 2010 to 2019 as well. Excel and inductive reasoning were used to evaluate the data. The significance of statistical analysis provided context for the data to inform the reader. A telephone interview served as the third research method. In-person interviews are frequently used in qualitative research (Kvale, 1996). However, in-person interviews with the female participants were not possible due to the coronavirus pandemic (Covid-19). The challenge faced when using this method of data collection was finance. There was a need to buy talk time and that required some money. The second difficulty was related to the actual technology. A few of the learners lacked a personal phone. As a result, they had to borrow from others, which meant they needed plenty of time to prepare for the interviews. Logistical, pragmatic, and safety issues were identified by Lobe, Morgan, and Hoffman (2020) as some of the difficulties encountered during interviews. Focus group talks were the final technique for gathering data. In contrast to interviews, a focus group discussion was facilitated by the researcher. The scenario involved the researcher facilitating a participant-led online group discussion. Making a list of inquiries to direct the focus group conversations was the initial stage. The study's female participants were given access to a data bundle so they could take part. This strategy cost money, as was hinted at in the conversation regarding the interviews. Therefore, a free data bundle was provided to every participant in the focus group discussion. The Central West Education Division in the Central Region of Malawi is location of the four sampled secondary

schools: two male boarding facilities secondary schools and two district boarding facilities secondary schools.

The objective of this study is to investigate whether low girls' academic achievement in boys boarding facilities secondary school can be attributed to the absence of girls boarding facilities. In this regard, three subordinate questions were attached to the main question that guided the choice of the research design. The research seeks to cover the following objectives.

- a. To find out how girls in boys boarding facilities schools perform during MSCE and public university selection.
- b. To explain the factors contributing to low academic performance among girls in boys boarding facilities schools?
- c. To show the extent to which the Ministry of Education support girls' academic performance in boys boarding secondary schools in the context of the new investment policy

Research Approach and Design

According to Grover (2015, p. 1) "a research design is an overall method that one adopts to answer a research question, and it entails the integration of diverse components of the study coherently and logically, guaranteeing that the problem is solved efficiently". Grover (2015) also described a research approach as a "plan and procedure which are followed from broad assumptions to detailed methods of data collection, analysis, and interpretation in research" (p. 1). Therefore, each particular research design that is chosen in a research study demands a corresponding research approach as well as methods; whereas research methods are ways of getting

information from the participants. This section, therefore, discusses the research design, research approach, the population, sample, and sampling technique, the time, place, and sources of data collection, tools and methods of data collection, and methods of analysis.

Research Design

There are multiple subtypes and two main research study designs (Kapoor, 2016). Because of the nature of the topic, it is unlikely that either quantitative or qualitative data by themselves would adequately address the research question on whether the government should increase funding for girls' boarding facilities. As a result, both qualitative and quantitative methodologies were used in the study. To enable a thorough investigation of how boarding facilities may affect students' Malawi School Certificate of Education examination pass rate and public university selection as they enroll in either district boarding facilities schools or males boarding facilities schools, a mixed-methods study was chosen as the research's design. In his article "Mixed-Methodologies Design in Biology Education Research: Approach and Uses," Warfa (2016) provides strong evidence in favour of the adoption of mixed research methods. The author found that mixed techniques are frequently used in educational research studies to support their findings and contextualize them. The goal of using mixed methods was to maximize their advantages over using just one method while minimizing their disadvantages (Creswell, Clark, Gutmann, Michelle & William, 2003; Johnson & Onwuegbuzie, 2004). A mixed research design was selected to create a road map for carrying out an inquiry, despite the fact that choosing the best research design was not particularly straightforward. The explanation was that the qualitative technique resulted in a casestudy study, which is more appropriate for procedures of situational evaluation. In

comparison to when only one method was employed, the mixed -method approach enabled a strong gathering of different data and improved knowledge of girls' academic performance in males' boarding schools (Creswell, 2014). Duchon and Kaplan (1988), who discovered that the adoption of integrated research methods enhances study quality, provide additional recommendations. Additionally, more researchers have suggested that combining research methodologies helps to better comprehend the research theory that is being employed in the study, which also helps to ensure that empirical data is interpreted correctly (Dubois & Gadde 2002; Storbacka, 2011). Creswell (2003) specifically defined the mixed research method as a deliberate decision to use both research approaches from quantitative and qualitative methodologies to answer the study hypothesis after taking all of these factors into consideration (Cronholm, & Hjalmarsson, 2011). In "An Introduction to Mixed Research Methods," George (2021) made the case that mixed methods are crucial for contextualizing study findings and providing specifics for the conclusion section. He added that the employment of hybrid methodologies raises the credibility of research. This study's findings indicate that using diverse techniques allows for greater flexibility since it prevents researchers from becoming "prisoners of a certain method or technique" (Robson, 1993, p, 291). Triangulation was advised by Burton and Tuner (2015) to increase the validity of the research. Triangulation is the process of studying a research topic of interest using several different methods (Burton & Obel, 2011). Separate data were collected and analyzed, but the results of one set were supported or refuted using the data from the other. The primary qualitative part of the study was the girls' Malawi School Certificate of Education examination pass rate, public university selection, factors that contribute to the

differences, and the extent to which the government supports girls that are selected in boys boarding facilities secondary schools. The quantitative data were concurrently collected to address questions on finding the academic differences between district boarding facilities secondary schools and boys boarding facilities secondary schools.

Warfa (2016) mentioned methodological issues that needed to be considered when using mixed research methods. Creswell (2007, p. 205) provided a checklist of questions for designing mixed-methods study which was used to decide on the sample size which was administered through convenience and purposive sampling techniques. Consequently, the nature of the topic required an interface with head teachers, teachers, female learners, and policy makers. Additionally, the gathering of both qualitative and quantitative data was not a burden on the participants. Therefore, each of the 102 participants was apportioned to answer either questionnaires, interview questions, or conduct group discussions. The data were also gathered from official statistical records from the Malawi National Examinations Board (MANEB). Lastly, there was anticipation to change the analysis of different types of data in the course of conducting the investigation. This called for systematic planning of the study.

Research Approach

A research approach which is also referred to as a philosophy describes the methods used by researchers to collect, examine, and use data for an investigation. In this particular research study, the researcher adheres to the philosophical stance that stronger consultative efforts are required to address issues of influence and impact related to education gender gaps that have been observed in most developing nations, including Malawi. The methodology made it possible to address issues like "why" and "how" specific

education gender gap trends are produced. The interpretive technique helped the researcher get deeper understanding of girls' performance in Malawian secondary schools, particularly those who were selected to attend secondary schools with boarding facilities for boys. Researchers who use interpretivism generally utilize both qualitative and quantitative techniques in a single study. Nevertheless, they reject the notion that there is a single approach that will always uncover the "truth" of a phenomenon because they think there is no one "right path" to knowledge. Therefore, the researcher insisted to use the approach because it allowed describing objects, humans, and events in addition to a deep understanding of them in a social context (Pham, 2018). The researcher also included an interpretive perspective to increase knowledge of the crucial, social, and organizational difficulties related to the development and implementation of Malawi's new investment strategy. Studies on girls' accomplishment in Malawi should be a challenging topic due to the various interpretations that researchers come up with given the fact that there are different learning contexts.

Research Strategy

A research strategy is described as "the general plan used by a researcher in answering research questions" (Lewis, Saunders, & Thornhill, 2009, p. 600). Research strategy was also defined by Bryman (2008, p. 698) as "the general direction the research takes." The research approach in this doctoral thesis gave a general direction and the steps required in examining how females in the boys boarding school performed during the Malawi School Certificate of Education examinations and public university selection from 2010 to 2019. In order to achieve the predetermined research objectives and respond to the research questions, an action research case study has proven to be the most effective

method. More proof indicates that action research projects are widely employed in many academic fields, including this one. The robustness and reliability of the study's findings were strengthened by the incorporation of supporting data from numerous sources, including policymakers, teachers, head teachers, and female students. Ferrance (2000, p. 6) provides proof that "an action research study is more collaborative than theoretical" when it comes to tackling educational issues and obstacles. According to Creswell (2009, p. 13), a case study approach has been helpful "in an in-depth exploration of events from several perceptions of the intricacy and distinctiveness." The significance of case study research is that it depends on the study's goals and research questions to drive the technique, rather than indicating the usage of a specific methodology (Johnson & Onwuegbuzie, 2004; Merriam, 2009). Simon (2009, p.10) backed up the decision to use the case study approach by pointing out the necessity to improve comprehension of a particular subject. There could be no other strategy used besides the case study method, given that the majority of case studies are used in the evaluation. According to Creswell (2014, p. 14), cases are constrained by time and activity, therefore the researcher had to gather information within the allotted period.

In previous research, the academic performance of girls has been investigated across a larger range of school factors, including boarding facilities, the role of government, and school-level management. However, there haven't been many in-depth studies of females' academic performance in schools with boys boarding facilities. The current study has concentrated on the Malawi School Certificate of Education examination pass rate and the public university selection rate as the realm of knowledge in order to address the issue. In this context it has been recommended to use an action

research case study as a strategy to address the research issue. This is the finest alternative strategy for generating information through involvement of participants to help solve the research problem. In Matoane's (2019) citation of Sommer (2010, p. 21), the author emphasizes the idea that "all other stakeholders in the field of education could potentially contribute to creating sustainable learning for the girl child." The researcher's professional history provided the inspiration for this approach, along with the firm conviction that study participants would perform better on challenges they had independently identified. Furthermore, it was believed that when head teachers and policymakers independently review and evaluate their work, and from those better techniques of working differently are implemented, education for the girl child in boys boarding facilities schools will change for the better. With due consideration, challenges facing the girl child in accessing sustainable learning in boys boarding facilities secondary schools need to be aligned to both national and international policy instruments that not only seek equality in education but also gender equity. This could be one way to empower the practitioners who are responsible for making better and more informed decisions in the operations of schools. This gives a significant advantage because the public can reliably hold those entrusted to manage the education of their children, accountable for learners' low academic achievement.

Due to the uniqueness of the boys boarding facilities secondary schools and the presence of girls in these schools, ordinarily, a researcher would not escape the use of the case study research approach. However, some researchers utilize the multiple case study design to allow the researcher to explore the phenomena under study through the use of a replication strategy (Zach, 2006). In the case of the current study, each

secondary school group was treated as a case, making it a multiple-case study. Choice of multiple case studies provided for rigorous data collection, analysis, comparison, and revision during the entire study which is referred to as constant comparative method" (Birks, Francis & Tie, 2019). The choice of multiple cases was not necessarily for replication as discussed by Zach (2006, p. 9) but for comparing the different responses as given by the participants. While Yin (1994) argues that using multiple case studies approach restricts the researcher from total control of the events, arguments in UKEssays (November 2018), add that, the approach fails to demonstrate a more general principle in connection to the case being studied. Some authors have gone further to discredit the approach by citing a lack of clear representation and statistical generalizability. They have cited an inability to find similar cases of similar data which can be analyzed in a statistically significant way. In addition, it has been argue that due to the complexity and detailed data collected, there are different interpretations and this may contribute to subjectivity in the entire research report (Conford & Smithson, 1996).

Some authors further argued that case studies become absolute, as such, they fail to build theories and fail to determine the number of cases to study (Easton, 2010; Piekkari, Plakoyiannaki, & Welch, 2010). Despite all this, the approach is favored for its flexibility in data collection, which can include, the use of secondary sources or interviewing respondents by telephone calls or by e-mail. To broaden the understanding of the study topic, it was important to collect both primary and secondary data.

Glanz (2016) used a single case based on the work of several prominent figures in the area of single case study design such as Willis (2014) and Yin (2013) to examine

the teachers' teaching practices. Under the research procedures, Glanz (2016, p.4) served as a participant- observer to monitor the progress of the various initiatives to determine the impact they would have on changing classroom teaching practices for the betterment of the learners. In this current research, four school samples each standing as a single case study have been used to provide data for analysis from several sources. Data obtained from the four school models were compared to find out how each set of data approved or disapproved of the other. Ideally, a case study method, and in particular the multi-case studies design, was a proven tool for achieving a deep meaning of a specific phenomenon because of the consistent patterns of the girls' academic performance. In addition, some grey areas were identified which require further research. Merriam (1998) argued that using more than one case study aids in discovering more appropriate variations across the cases. Furthermore, Creswell (2007) suggests that multiple cases generate robust findings from the different perspectives of the issue under study and according to Yin (2009) this makes it possible for the exploration of similarities and differences within and between cases. Furthermore, the literature demonstrates that the use of a multiple-case studies design is good for replication strategies in which cases are selected to obtain similar results, whereas, in theoretical replication, cases are selected to explore and confirm or disprove the patterns identified in the initial cases.

Brante (2018) examined how 15 students in secondary school solved an online inquiry task. The students received instructions on how to select and evaluate information by attending to the sources of the information. Through interviews and observations, it was found that students knew more about the evaluation of sources than they displayed in

their final product. The use of multiple-case studies aimed at establishing how the taught sourcing skills were employed in learners' group tasks. Ideally, the general principle targeted the learners' sourcing skills, and the issue, in particular, was how different student groups performed the task and how that impacted learners' performance.

The greatest challenge that was faced in this study was the issue of data collection from the female participants. There were several trips made to the sampled schools to arrange for consent and during data collection, the learners were at their homes due to school closure as a result of the Covid 19 Pandemic. Therefore, the research method for the female learners was adapted to WhatsApp group discussions, online questionnaires, and telephone conversations. The hardest method of data collection was telephone interviews because, it required a lot of time, patience, and enough airtime. The method proved expensive. The response rate was relatively low as not all participants took part in the interviews. Some of the female learners reportedly had no telephone handset at the material time and some complained of unstable internet connection.

This current study would also have been conducted using a longitudinal research method because it would also use either qualitative or quantitative or both types of data collection methods. However, this method would have required a researcher to consciously gather data from the same subjects over different periods which would not be appropriate in this current study due to time constraints and it would also not be feasible. There is a high probability that the researcher would lose touch with some of the respondents. Despite the hindrances outlined above, the approach is useful in studies where a researcher is evaluating relationships of cases. For instance, a study about the

relationship between the risk factors and the development of diseases and the outcome of treatments would be investigated over different periods (Caruana, Roman, Sancheez, & Solli, 2015). Another good example of longitudinal research involves the examination of malnourished children in their early years and following them up for a considerable period. According to the work of McKinlay (2011), longitudinal research refers to the analysis of data that is collected at multiple points in time. Mckinlay has argued that the advantage of such research design is that, the researcher can establish the changes that may have occurred as compared to other factors such as personal habits among the participants. A longitudinal method is well contrasted with the use of cross-sectional analysis where it has been discovered that the method is less valid in examining cause and effect relationships which the action case study method ably addresses.

Population and Sample of the Research Study

According to Shakul (2020, p. 2), "a population is a set of all the units which possess variable characteristics under study and for which the findings of the research can be generalized." Black (1999) defined a population as any group that has a common set of identities. For instance, in a study on the attitude of teachers and head teachers toward inclusive education, Sharma (2019) presented teachers and head teachers as a population under-study in the schools of Himachal Pradesh. In her study, government senior secondary school teachers and head teachers of Himachal Pradesh formed the population for the study. Since the researcher could not involve all teachers and head teachers in the schools, a sample of 160 teachers and 40 head teachers was selected to participate in the investigations. According to the description by McLeod (2019, p. 1),

the target population is "the total group of entities from which a researcher draws the sample". To remain focused and deliver effective study findings, a targeted population in this study was defined from the four secondary schools based on a standard population size of 360. The specific target group comprised the form four female students, head teachers, subject teachers, and Ministry of Education officials. Nworgu (1991, p. 68) noted that "it is only a part of the population that is studied, and whose findings are expected to be generalized to the entire population". In this study, there are 4 head teachers, 72 female learners, 24 teachers, and 2 policy makers that share common observable characteristics which this report attempts to unveil through the data gathered.

The study targeted adults in varied age ranges; from eighteen years to fifty years and above. The head teachers, subject teachers, and ministry officials hold varied educational and professional experiences which significantly enriched research findings in the final stage. Form four female participants were well placed to describe the events taking place in school that relate to girls' academic achievement after staying close to four years at a secondary school. The study used girls that were in the schools at that time because those girls that completed school in the years from 2010 to 2019 could not have been easily reached. This was how the convenience sampling technique became helpful. Bhardwaj (2019), among other scholars, argued that convenience sampling is used to select only those research participants that are easily accessible to the researcher. Other notable merits of convenience sampling include the participants being in three different groups as follows, participants in a district boarding facilities secondary school, participants in boys boarding facilities secondary school, and policymakers at the Ministry of Education.

Sample Size

In any research, it is not possible for the researcher to collect data from all cases from a population under study; and this, therefore, requires selecting a sample (Taherdoost, 2017). According to Nworgu (1991, p. 69), this part of the population is referred to as "a sample". Therefore, some authors have described a sample as a group of individuals that participate in the investigation, and such people are referred to as research participants. According to Saratankos (2005), sampling is essential in research studies, because it enables the researcher to select a portion or section of the population to represent the entire population from which relevant information can be gathered. Browner, Cummings, Hully and Newman (1988) look at the sampling process as involving the selection of a statistically representative sample of individuals from the population of interest in a study.

The size of the sample depends on several factors like time, cost, energy, and statistical power (Alreck & Settle, 1995; Hill, 1998). However, the correct sample size depended on the purpose of the study and the nature of the population being studied. Cohen and Manion (1994) assert that there is no clear cut to the question of how large a sample should. Data saturation is when no new data and new themes emerge (Fusch & Ness, 2015 p.4). Both sample size and participants were also purposefully selected to increase the research's validity. Patton (2015, p.264) described purposeful sampling as an attempt at selecting information-rich cases for in-depth study. From the selected 102 samples, it became easier for the researcher to conclude the purpose of the research.

The use of class registers and staff returns in each school was important for choosing one subject among the learners and teachers. Female participants in each

school were divided into three groups, the first group filled out questionnaires, the second group conducted focus group discussions and the last group was involved in interviews. The one hundred and two prospective respondents were voluntarily recruited from the four sampled schools and the Ministry of Education, Divisional office.

Permission from the Ministry of Education was sought to conduct the study in the selected secondary schools. The participants were reached by using a gatekeeper letter and a letter of authorization from the Ministry of Education. The participants were given both written and oral information regarding the study. The process of recruitment ensured that participants were not obliged to participate forcefully and that they would withdraw at any time without having to give reasons. The researcher, therefore, worked with those participants that had given consent and were fully aware of the research information as supplied by the researcher.

Sampling Techniques

An article review "Types of sampling in research" by Bhardwa (2019), urged that the study topic and purpose of the study determine the types of sampling to employ in the research. The topic in this study was restrictive to the two types of sampling which are purposive and convenience sampling. Purposeful sampling "is an ideal specific qualitative approach to most case selection" (Patton, 2015, p. 265). Purposive sampling was useful because the study involved academic matters and therefore the researcher planned to gather data from the angle of secondary school education policy, national examination performance, and the learning environment learners. As seen from the areas of interest, the participants were brought from all available angles, thereby

making the group heterogeneous. Etikan, Musa, and Alkassim (2016, p. 3) described this type of sampling as a maximum variation sampling process. This is a sampling technique that involves selecting participants across diverse characteristics in a population. Hence, the researcher deliberately selected only those in the field of education as respondents. The idea was to bring a better understanding to a research problem. The researcher's first step was to reject all the individuals who did not fit into this particular group of participants. This type of sampling is also known as judgment sampling. In addition to purposeful sampling, convenience sampling was used to select study sites as well as participants.

The study focused on the comparative Malawi School Certificate of Education examinations pass rate and public university selection rate between the two secondary school models that do not have comparative school resources. Nevertheless, literature shows that schools that lack basic teaching and learning resources, physical facilities, and project poor management of school resources negatively affect the performance of learners (Akomolafe & Adesua, 2016, p. 38). The current study considered the presence and the absence of girls boarding facilities in the two school models as modulating factors in girls' academic achievement. A related study was done in Nigeria by Babatunde, Sabitu, and Oluwole (2012) investigated the effect of school types and facilities on learners' academic performance. The results showed that there were no academic gaps between public and private secondary schools. In the current study, girls boarding facilities form part of the school climate that Cohen et al. (2009, p.182) described as the "quality and character of school that has a direct impact on the teaching

and learning processes that take place in schools". According to Maxwell et al. (2017, p.

1) "School climate is a leading factor in explaining student learning and achievement"

Materials/Instrumentation of Research Tools

This section outlines the tools for data collection. Most researchers that investigate educational quality in schools have often measured academic achievement more than any of the other variables (Baaf, 2020; Grazia & Molinari, 2021; Koniewski & Hawrot, 2021). The use of either formative or summative assessments is common practice in investigating academic performance. This presents some practical advantages because examination grades whether at the school level or national level are available assessments for the schools and hence appropriate for the determination of the schools' success. For this study, I analyzed the data collected from questionnaires, interviews, focus groups, and MANEB's statistical record. This meant that a single research method was quite insufficient and therefore a multi-method approach was appropriate to fully address the research questions.

Essentially, after going through survey items the next step was to develop research tools and subsequently plan for piloting and validation.

Questionnaires

At this point of data collection, the use of an anonymous open and close- ended questionnaire was advocated with the belief that participants would explain in their own words what the topic meant to them. Abawi (2017) defined a questionnaire as a research instrument constituted to gather information from respondents. The advantage of using questionnaires is that the method is not only quick but also cheap and very

efficient in collecting data from a large sample. The disadvantage of the questionnaire is that at times respondents can easily mislead the researcher with false responses.

Students' Questionnaires

There were three reasons for choosing a self-completion questionnaire to collect both qualitative and quantitative data. Firstly, the idea was to compare data collected from one school with other participants from other schools. Secondly, it was to achieve consistency by using the same tool for this research to be completed by the participants from all the sampled schools. Thirdly, the use of questionnaires offered the opportunity to data for statistical data as well. Considering that there were more participants to be reached, the use of questionnaires was the ideal method of collecting survey data from large numbers of respondents in a quick and short time (De Vaus, 1995, p.94).

The first section of the questionnaire asked about participants' demographic characteristics which also aided in the provision of statistical data. The questions required the participants to explain their interpretation of girls' academic achievement whilst in boys boarding facilities school in their own words by explaining the state of the girls' academic achievement, identifying limitations, and providing solutions to the challenges the girls face from their past education.

Since the learners were at home due to school closure as a result of the Covid -19 pandemic, the questionnaires were posted on the forum for the students to read and send back their responses. As earlier stated, the learners were provided with a data bundle to facilitate correspondence. It took a little more time to receive the responses, but the method proved workable and was able to meet the study schedule.

Teachers' Questionnaires

The questionnaires attempt to establish the trend in girls' MSCE performance from 2010 to 2019 and explore the implication of teaching girls as day scholar in boys in boys boarding facilities schools. The first section of the questionnaires requested participants to provide their demographic data. The questionnaires were vital in providing both qualitative and quantitative data. The second section dealt with teachers' views on how girls have been performing during national examinations and suggested limitations and solutions to the prevailing situation at the school.

The questionnaires were delivered at the schools and allowed the teachers to complete and were collected thereafter. The challenge with this method was that it took more time for teachers to complete the questionnaires because they were not readily available at the time of my visits. However, this method emerged not problematic, because the contact officers in the schools made an assurance to have the questionnaires completed within the agreed time. As alluded to in the earlier statement, consistency was achieved by using the same questions in the four sampled secondary schools.

It is far more important to consider that research studies as this one are very important in providing meaningful feedback from teachers, students and parents; even though the researcher failed to recruit parents as research participants. Nonetheless, the participants that were recruited in this study were the right participants to provide data on the attempt were made to find out whether the girls in boys boarding facilities secondary schools face specific problems in male-dominated secondary schools on account of having no designated girls' boarding facilities.

The respondent's perception of the different aspects about the benefits of boarding facilities were reported as beneficial and therefore, the researcher wanted to find out the extent to which teachers and learners themselves understood secondary school life in deficient schools such as boys boarding facilities schools.

Through use of self-made questionnaires, the researcher was able to get feedback from the head teachers and teachers on the overall insights into how individual female students in boys boarding facilities schools rate the general teaching and learning experience.

The researcher became mindful that assessing of teachers can be problematic, so it was decided that the researcher develop open mind so that it becomes possible to keep an eye on the trend being studied.

Table 3.1

Table 3. 1 Shows the Breakdown of Respondents Scheduled to Complete Questionnaire

Type of	# of respondent	Total sample	Percentage
respondent			
Head teachers	4	4	100
Teachers	24	24	100
Female learners	24	72	33.3
Total	52	100	52

Focus Group Discussions

Focus group discussion was chosen as part of the qualitative research approach in this study. The method aimed at collecting data from a purposely selected form four

female learners from the selected secondary schools. These female learners were the ones chosen for ideally having a similarly strong interest in the topic of the study as evidenced when they gave consent to participate in the study. Focus groups were ideally designed to perceptions and feelings and also to understand what female learners thought about girls' academic achievement whilst learning in boys boarding facilities school. Such being the case, it was not expected of the participants to reach an agreement on what was under discussion.

Mini focus group discussions were conducted for at least thirty minutes at agreed times using a WhatsApp chat group. Because there was prior interaction with the female learners, I was known to the focus group participants. This played an advantage in that the participants were aware of the exact goal of the discussion and it was easy to collect data.

The following were the steps that were taken to conduct focus group discussions. Firstly, the agenda for the discussion was clearly stated that it was about finding out if girls boarding facilities are of any significance in boys boarding facilities school where girls attend lessons as day scholars. The discussions were ideally based on an understanding of the girls in boys boarding facilities secondary schools found the learning environment conducive to their educational attainment. Further discussions were based on what the girls considered as hindrances to academic success and what could be done to have the situation improved. Secondly, the questions for discussion as alluded to in the first step were to keep the questions as open as possible and use simple and clear language that does not jolt the female participants away by using appropriate terminologies. Thirdly, using the selected participants, a WhatsApp group was

created and a clear schedule and agenda as stated above were set up to ensure that the focus group discussions run smoothly. Lastly, during the focus group discussion, members were free to make posts and comments. Ideally, the moderator would keep on guiding participants wherever the discussion was deviating.

The process of collecting data for the mini focus group involved preparing a discussion guide that contained ten questions. As a matter of bringing incentives, each participant was given a free data bundle so that they freely participate in the discussion. The session usually began by brainstorming in which all questions believed to be crucial were being re-emphasized. The questions were well selected and re-ordered according to the hierarchy of importance. The choice of words in the question was made clear so that it became easy for the respondents to understand and provide desired responses.

 Table 3.2

 Table 3. 2 The Number of Respondents Scheduled for Focus Group Discussions

Respondents	# of respondents	Total sample	% of the sample
Female students	24	72	33.3

Interviews

The study topic on "girls' academic achievement in boys boarding facilities school" invited the deployment of use of interviews as a method of data collection. In the noble views of Merriam (2016, p.137) "interviews form the main primary source of data in qualitative research". Interviews form a conversation among members as a way of gathering descriptions of the real world from the point of the interviewee (Kvale, 1996). Therefore, interviews were conducted with female learners and policymakers. These interviews revealed the need to have more time for data collection considering that there

were 24 female learners and two policymakers to be interviewed by telephone. The number seemed to be higher than it would take to conduct one face-to-face interview. Nonetheless, this approach in the material time using telephone interviews was less or more personal than the face-to-face interviews and hence took up most of the researchers' schedule time.

Since researchers have contended that a research instrument is never perfect, one of the processes to ensure that the tool was closest to perfection was to quickly identify and correct failures in the questions. This problem was corrected by conducting a pilot study using a selected population from a nearby Community Day Secondary School. The pretesting of the research tool before actual research execution gave room for refining the questions thereby making the questions comprehensible.

Interview with Learners. Interviewing female learners as a method of data collection in this study was of great significance because interviews form part of the whole learning process and experiences in the schools being investigated. Openended interview questions to the learners emphasized the learners' impression of their academic performance in boys boarding facilities school, perception of education status in a co-educational school, and the related factors for either promoting their achievement or militating their academic progress.

The approach did not emphasize the failures from the side of the learners but instead focused on the absence of the resources that are needed by both teachers and learners for effective teaching and learning processes. The researcher was keen to understand how girls cope with acquiring knowledge and skills in boys boarding facilities

secondary school. As already alluded to, these were telephone interviews. The reason was that learners were at home after schools closed due to the Covid-19 pandemic.

Table 3.3

Table 3.4

Table 3. 3 Sample Anti-Deficit Questions

Deficit questioning						Ant-deficit questioning							
Why	do	girls	fail	in	the	nat	ional	What	has	been	your	challen	ge in
exami	inatio	ns?						studyir	ng	for	your	nati	onal
								exam	nina	tions	fro	m Prir	nary
Why	are	boy	s b	oard	ding	fac	ilities	What	reso	ırces	do th	ink are	best
not g	ood	for t	he s	selec	tion	of	girls	efficier	nt in p	romotir	ng girls	s' educa	tion in
								boardi	ng fac	ilities s	chools		

Table 3. 4 Number of Respondents That Were Scheduled For Interviews

Respondents	# of respondents	Total sample	% of respondents
Ministry officials	2	2	100
Female	24	7	33.3
Total	26	7	36.1

Interviews with Ministry Officials. Interviews were part of the main methods in this research. Through interviews, the researcher craved to gain some understanding of policy practice and locate this practice within the theoretical framework so that the term 'investment' in education. During interviews with ministry officials, emphasis was placed on the Ministry of Education's perception of girls' achievement at Malawi School Certificate of Education and public university selection in boys boarding facilities schools. Furthermore, the interviews gave me insights into the activities being implemented across the country in a bid to improve the situation of girls' education in Malawi. The approach was chosen to understand what compelled the Ministry of Education to become actively engaged in selecting girls as day scholars while focusing on the resources that girls lack in boys boarding facilities school environment. Furthermore, the interview with the government official gave me more insights into the understanding of the general information on the status and nature of boys boarding facilities in secondary schools in Malawi and the historical, economic, and political background.

The researcher interviewed two education officials as policymakers to discuss girls' education issues in context with policies and interventions put in place by the government to promote girls' education. In the process of conducting the interviews, it was not possible to record the conversation due to the agreement, and there was no available device for recording. As a result, the data was recorded on paper and was reviewed several times. One other author retaliated that "the tape-recorder is important, but a lot of data can be gathered without a tape-recorder" (Sacks, 1992, p. 28). Further discerning views from Polsky (1998) state as follow:

Successful field research depends on the investigator's trained abilities to look at people, listen to them, think and feel with them, and talk with them rather than at them. It does not depend fundamentally on some impersonal apparatus, such as a camera or tape-recorder... (p.119)

However, Berg (2007) recommended a continuous reviewing process of the record to come up with the correct interview description. This is very important, especially in the absence of a tape recorder.

Records

According to MESA (2019), national examination pass rates are used as a reflection of acquiring learning outcomes, and that higher pass rate is what government, parents, guardians, and learners would want to see happening (p. 53). In this case, official statistical records from MANEB from 2010 to 2019 for the selected secondary schools were accessed and analyzed. The researcher looked for the data on the total number of female candidates who entered the MSCE examinations and the number that passed. This data was segregated according to the type of school model under investigation. The second equally important record was the schools' public university selection lists. Upon collection of the data, content analysis, as well as statistical analysis, were done.

In summary, this section discussed the research tools which were employed. The section explored the first practical steps required in conducting research. Any material that was used to collect data is called the research instrument or research tool. For example, characteristics of the research tools such as interviews, questionnaires, focus discussions, and documents were discussed.

Operational Definitions of Variables

In simple terms, a "variable" is anything that is intended to be measured in an investigation. Therefore, an operational definition describes how the variables shoul d be measured in an investigation. Privitere (2014) as cited in Slife, et al., (2016, noted that an operational definition is critical in giving meaning to a variable. However, not all identified variables may be measured because some are abstract. This normally happens when a researcher has several variables to be measured in the study. Ross (2015) argued that operational definitions define "a process of measurement" (p.3). This paper argues that the absence of a link between a variable and an operational definition makes it difficult to assess and interpret the data on academic achievement to inform the research questions. In this study, the pass rate is the key assessment calculated from the high stake Malawi School Certificate of Education examinations. The Malawi School Certificate of Education examinations are the only available academic achievement measure at the final stage in secondary school progress records. In this article, words like low and high pass rates are used to describe girls' performance in the sampled secondary schools.

Academic Achievement

Even though not all educational spending on goods and services takes place within educational institutions, there are more expenses such as parents buying school textbooks and materials, hiring part-time teachers, and student living costs for the purposes to raise skillful and successful learners to build their nations and the future. The probable way of checking this among the learners is through their academic achievement. An academic achievement indicates the extent to which specific learners attain specific

goals from an instruction offered in an educational institution (Ezike, 2018). Agarwal et al. (2021, p. 3092) noted that "academic performance is considered a pre-requisite for getting good jobs, a better career and subsequently a quality life". Several studies that were reviewed, indicated that learners' achievement was the only dependent variable under investigation (Marques, et al., 2017). Having all other variables independent demonstrates that academic achievement is affected by several variables (Gajda, Karwowski, & Beghetto, 2017). To avoid ambiguity in the interpretation and understanding of the concept of academic achievement, there were two stages in the operationalization of the study topic. In the first stage, the researcher considered the number of girls that passed MSCE as compared to those that failed the examinations for a range of ten years. The second stage involved examining the numbers of students that qualified and were selected to pursue a public university education.

For instance, the question wanted to establish if there were academic differences between the two school models. In this case, the numbers of learners who passed Malawi School Certificate of Education examinations in the years 2010 to 2019 in boys boarding facilities secondary schools were tabulated and then compared with the numbers of learners who passed MSCE in the same period in district boarding facilities secondary schools. The analysis of Malawi School Certificate of Education examinations pass rates is based on a pass-fail decision and scores or grades were not part of the statistics to answer the first research question. The grades that learners obtain during the national examinations determine who passes or fails the Malawi School Certificate of Education examinations. The operationalization word "grades" was used to measure learners' performance levels though there was little scope and depth about them. Most

researchers use final grades to determine learners' academic achievement. In a study by Jefferson and Paul (2019), student performance was operationalized by final course grades that were converted from numerical scores to traditional GPA letters. The authors derived the final course grade from tests, homework, class participation, and research project scores. The researchers wanted to find out the teaching method that was more effective over the 8 years. The study used scores from 401 traditional students, and 147 online students in an environmental science class to identify the instructional modality that produced better student performance. The data were analyzed through SPSS software to calculate specific values. The converted values were consequently used to make conclusions and validate the assumption. The overall research results indicated no significant difference in students' performance between online and traditional classroom students. Therefore, the use of grades as a test instrument was not only appropriate but also valid, and reliable.

Teachers' Qualification

Secondary school teachers' qualifications in Malawi require one to have three professional certificates; a Diploma in Education or Bachelors of Education and a University Teaching Certificate for those without educational courses. Due to shortages of teachers, most secondary teachers are recruited from those applicants with any university or college qualifications. A University Teaching Certificate is offered to those aspiring to become teachers but have no teacher professional qualifications. Recent research findings have attributed low education quality to the recruitment of teachers without professional qualification and training (Chimombo, et al., 2015).

Several researchers have investigated the influence of teachers' characteristics such as gender, educational qualification, and teaching experience on learners' academic achievement and the results have always varied from one study to the other (Aina, Garuba, & Olanipekun, 2015; Antony & Elangkumaran, 2020). Teachers' qualification is described in three spheres, which are training, academic, and experience.

A study report by Abere and Musau (2015) on "Teacher qualification and students' academic performance in science mathematics and technology subjects in Kenya" claimed that teachers' professional qualifications did not have a significant influence on students' academic performance in Science, Mathematics, and Technology subjects. In conclusion of the study, the two authors demonstrate that the teachers in the subjects mentioned needed to attend more in-service or refresher courses to acquire skills that would enable them to embrace and conform to the emerging technologies in the teaching methods to improve learners' academic performance in the Science subjects. Though Abere and Musau (2015) found out that there was no significant influence on the learners' achievement based on teachers' qualifications, earlier studies by (Njeru & Orodho, 2003; Ankomah et al., 2005; Asikhia, 2010; Yala & Wanjohi, 2011; Olaleye, 2011; Maguswi, 2011), indicated that teachers' qualifications influence academic performance. Asikhia (2010) cited in Lawyer (2014) found that learners' teachers failed to effectively implement the NCE English language curriculum and this negatively affected learners' educational achievements. The study employed a mixedmethods approach utilizing a case study. The study participants included ten lecturers and twenty students drawn through convenience sampling techniques. The study tools used were questionnaires, observation checklists, interviews, and field

notes. The data collected were analyzed by using descriptive/inferential statistics and thematic content analysis. The paper concluded that probably, the teachers lacked proper qualifications and recommended a thorough investigation of teacher training.

The study by Owolabi (2012), investigated the effect of teachers' qualifications on the performance of Senior Secondary School students in Physics. The investigation focused on finding out if the status of the teacher had an impact on the performance of the learners studying the subject of Physics. The study sample 78 male Physics teachers and 28 female Physics teachers in the 100 sampled Senior Secondary schools. The teachers' characteristics studied were male/female/, skilled/unskilled, graduate/no graduate, more years of teaching experience/fewer years of teaching experience. The 2009/10 school year Physics results were compiled from the schools' registrars. The author collated the bio-data of the respective Physics teachers with the year's result summary for each school. The study findings confirmed that highly qualified teachers produced better Physics results than lowly qualified teachers. Studies conducted by Yala and Wanjohi (2011) and Adeyemi (2010) revealed that teachers' years of teaching experience and educational qualifications were the prime predictors of learners' academic achievement.

Ewatani (2015) studied a sample of 20 schools from a population of 31 schools. The study used 400 Teachers' Teaching Experience and Academic Performance (TTEAP) questionnaires with 20 questionnaires per school. The study utilized the Mathematics and English Language 2004-2007 Senior Secondary School Examinations grades. The author used frequency counts of the number of learners who scored a credit grade in the two subjects under investigation. The collected data were analyzed through

descriptive, inferential, t-test, Anova, and regression. The final analysis revealed that teachers with more years of teaching than ten were the right measure for education quality among learners. The study findings reaffirmed the need for schools to retain teachers with more years of teaching experience to improve learners' academic performance.

Boarding Facilities

Most researchers have described school facilities as consisting of all types of buildings for academic and non-academic activities; equipment for academic and non-academic activities; areas for sports and games, landscape, farms, and gardens, including trees, roads, and paths. Other facilities needed by secondary schools include furniture and toilet facilities, lighting, acoustics, storage facilities and parking lots, security, transportation cleaning materials, food services, and special facilities for special needs. School facilities and infrastructure appearance and maintenance influence most parents and convince them to make judgments about the qualities and effectiveness of what goes on in the school. It is believed that, without such facilities, the empty buildings, no matter how attractive they are cannot be effectively used for educational purposes, (Ogunsajo, 1980).

The latest study reports from Ohaeri and Omorojor (2020) demonstrate the crucial role hostels play in improving and sustaining the academic performance of students in tertiary universities in Nigeria. A study in three public universities in Rivers State in Nigeria used 15,195 hostel administrators and students to investigate how hostels could be managed to sustain the academic performance of students. Data were collected from a self-titled questionnaire titled "Management of Students" Hostels in Public Universities Questionnaire (MSHPUQ) from 60 hostel administrators and 140

students. The study used mean and standard deviation to answer the research questions whose hypotheses were tested at a 0.05 alpha level using the z-test statistic. The findings of the study admitted that the construction and better maintenance of hostels can improve students' academic performance in the three Public Universities in Rivers State.

Recent reports from Chinese research studies provide the impetus for governments' big investments in boarding programs of public schools in rural and lessdeveloped areas. Bodovski and Tan (2020) reported on a study that investigated whether and to what extent boarding schools compensate for children's family disadvantages in terms of mathematics and reading achievement. The study used a longitudinal sample of middle school students that took part in the China Education Panel Survey (CEPS), administered by the National Survey Research Center at Renmin University of China (NSCR). It is reported that the database was specifically made to investigate the influence of family, school, and community on learners' educational results. According to the reports, the CEPS supplied students' test scores as supplied by the schools in both datasets. Therefore, the CEPS survey included a question of whether the learners were boarding on campus from Monday to Thursday. Then, based on learners' responses, a dichotomous variable of boarding status was generated. The study first computed descriptive statistics and scrutinized how learners' characteristics differed between boarding and day student groups by using a T-test. The study findings indicated that boarding students performed better than day students in 8th-grade mathematics tests. The two authors further noted that learners that were residing at the school campus during the week significantly improved their academic performance in both subjects. The overall study findings were significant in that; they provide empirical research evidence in the Chinese context for governmental investment in boarding programs to improve learners' academic achievement. In support of Bodovski and Tan (2020), Ramli and Zain (2018) reported that facilities such as E-learning of System Management, teaching materials, library, hostels, sports facilities, and s c h o o l transportation were all noteworthy to influence learners' academic achievement.

Female Education

Girls' secondary education is a powerful deterrent to becoming pregnant in adolescence. In all sub-Saharan African countries with available data, early childbearing is higher among adolescent girls with no education or only primary education. Female education is the type of formal knowledge given to girls at all levels in an educational institution. The study discusses female education in unison with governments' willingness to invest in girls' secondary school education. Rashid and Kumari (2016) argued that female education was even more important than male education because everyone suffers when girls are not educated. When females are educated, their educational impact extends to their families, societies, and their nations become healthier, safer, and more prosperous than when the girls are not educated. Contrary to this assertion, many girls do not have the opportunities to enroll in most educational institutions schools or higher education. Odmore (2015) identified some of the challenges like poverty, religious customs, menstruation, child marriage, war conflicts, patriarchal and distaste for Western education just to mention a few. This study, traditions, therefore, discusses policy interventions that have promoted female education in Malawi.

A paper developed by Hong, Kim, Park, and Sim (2019) investigated the causal effect of enhancing female education and reducing gender education inequality on

various measures of sustainable development. This study was informed from two fronts. Firstly, the human capital theory and economic growth assume that a larger percentage of human capital is accrued through going to school and applied to producing goods and services. Secondly, there was a quick realization that investment in education ought to be genderless for a country to achieve sustainable and inclusive growth measures. The report cited Schultz (1989) as having described how educational investment leads to economic growth. The study utilized the primary dataset utilized in the Education Attainment for Population Aged 25 and over from Barro-Lee Educational Attainment Data. The data provided educational attainment estimates for 146 countries from 1950 to 2010 using a five-year interval. The gender education inequality on economic growth was investigated as a dependent variable. The study utilized seven levels of schooling which included no formal education, primary school total, the primary school completed, secondary school total, the secondary school completed, tertiary school total, and tertiary school completed. Based on the analysis of the data the research findings suggested that increasing females' school opportunities from the primary school educational level were an effective way for countries to develop. The recommendations were that countries needed to develop policy tools that encourage female education. The genderless policies would target providing girls with scholarships, female dormitories, and girls' schools, as well as implementing compulsory primary schooling, which may effectively promote not only female education but also sustainable economic development.

MSCE Pass Rate

Malawi School Certificate of Education examinations pass rate is the dependent variable. Data to check the learner's achievement was drawn from the official MANEB

Statistical records from Malawi School Certificate of Education examinations grades for the years 2010-2019. The examinations measured the academic skills and knowledge in Sciences, Languages, and Art Subjects. Malawi National Examinations Board (MANEB) administers the examinations and awards grades corresponding to the levels of achievements to the candidates in the best six subjects that the student performed very well. Grade 9 indicate failure fail, grades 8 and 7 indicate pass, grades 6, 5, and 3 indicate credit, and grades 2 and 1 indicate distinction. Students deemed to have passed the examinations must pass in six subjects. All Form Four students write the same examinations but probably under different conditions and after marking the examinations at a national level, the results are announced to the public.

Public University Selection

The Malawi School Certificate of Education examination is the final examination at the secondary school level in Malawi. Learners who pass this examination and get six credits qualify for selection into both public and private colleges and universities or look for jobs on the market. The study compared the numbers of girls selected for public university education in the two school models.

School Model

In this study, the school model stands for a school being either, with boarding facilities secondary school or not. In Malawi, a boarding school is designed to cater to learners across the nation and district. Schools with the label "day" largely get learners within the schools' location. This is unlike in other countries where there are lower or upper secondary schools. Each school model depicts a special type of school environment where facilities like classrooms, hostels, beds, mattresses, libraries,

adequate numbers of teachers, laboratories, and computers as well as teaching and learning resources are differentiated. The current study looked at the school environment alongside the school model because generally, the school environment influences the school model.

Study Procedures and Ethical Assurances

Before I started the data collection exercise, an electronic version of the completed ethical form was submitted to the supervisor who then reviewed it and provided feedback. Upon supervisors' satisfaction, the initial approval was given for the supervisor to forward this to the Unical University Research Ethics Committee to make final approval. Approval was very important to safeguard research ethical issues. UREC approval signified that the ethical requirements had been met and that I was fully commissioned to collect data from the research participants. Gray (2014) urges researchers to ensure that they get informed consent, respect the privacy of participants, avoid undue deception, and avoid harming the participants. It is for these reasons that Unical University follows the international guidelines for research with human participants, as prepared by CIOMS (Council for International Organizations of Medical Sciences) in collaboration with the World Health Organization (WHO). The document, International Ethical Guidelines for Health-related Research Involving Humans, Geneva (2016), indicates how the ethical principles outlined in the Declaration of Helsinki of the World Medical Association are effectively applied, particularly in low-resource settings.

Issues of confidentiality and anonymity were paramount. In the process of data collection, information about telephone contact numbers, names of the schools and

participants, emails, and postal addresses were under restrictions. Participants were neither allowed to write their names nor identify themselves or their schools. The names of the schools were schools A, B, C, and D and their addresses remained anonymous so that they could not easily be identifiable. Through the consent form, participants were also assured of voluntary participation and that data collection was non-stressful such that those wanting to withdraw would be free to withdraw without giving reasons or any ramifications. Respondents were assured that they would not feel guilty or ashamed of their contribution if the findings would become public. I then provided the participants with written consent forms and allowed them to decide if they wanted to take part in the research or not. The consent forms were signed and withdrawn from them for recording with the Doctoral team. Obtaining consent was an important component of the research study. It was imperative that the person providing consent must surely understand the information. This involved talking about the study in simple and plain language so that there was clarity. The researcher had full contact details for anyone wishing to make follow-up and enquires about the study. The researcher was responsible for handling all inquiries and requests. Consent was also obtained from the Ministry of Education and approval was granted in a written form. Further consent was also required to be sought from the sampled schools and approval was granted in a written form.

102 respondents were comprised of 72 females from form four, four head teachers, 24 teachers, and the two ministry officials. Recruitment was through the head teachers of the schools and the Ministry of Education Secondary School Directorate. The researcher was welcomed in the schools through the use of a gatekeeper letter and

letters of authorization from both the head teachers themselves and the Ministry of Education.

The researcher visited the head teachers and the teachers in their respective schools. The questionnaires were delivered by hand to the schools and waited for the respondents to complete and collect them later. This gave the respondents ample time to complete the questionnaires and that increased the questionnaire return rate

Data from female students was collected using focus group discussions, self-administered questionnaires, and telephone interviews. The 24 girls from each sampled four schools were divided into three groups and each group had six members. There were two WhatsApp groups; a completed questionnaire was sent to the groups and the other members were involved in focus group discussions. The third group of members was interviewed through telephone calls. The two WhatsApp group members were given a free data bundle by the researcher. All the participants were engaged in data collection upon an agreed time. There was no recording due to the absence of recording materials. The researcher depended much on listening and writing down the responses from the interviewee. Each set of respondents was asked their questions on specific issues and this ensured that enough data was collected.

Ethical Assurances

As stated in the above heading, this section is about ethical assurances. The main purpose of adhering to ethical issues is an attempt to protect the subjects from harm. Further to this, the section moves on to describe how the participants were made to participate in the study, as well as marinating their right to privacy. It then also considers the upholding of honesty with professional colleagues. In the final part of the

section, the role of the researcher is clearly outlined on issues to do with avoidance of bias, and personal and professional experience on the subject topic.

Dooly, Moore, and Vallejo, (2017) argue that research studies in educational contexts, just like any other study require strict adherence to ethical matters because of the involvement of human subjects. Akaranga and Kamu, (2016) add to Dooly's point by noting ethical adherence supports the main aims of the research by providing accurate data on which decisions are based. It is therefore important that a researcher be conversant with all basic ethical principles and knowledge about policies and procedures in safeguarding participants. The other reason for adherence to research ethics was to gain public trust so that no part of the research project contravened the policies and procedures.

The first step in adherence to ethical issues was careful selection of the study topic. The topic selected was not in any conflict with research ethics as argued by Fouka and Mantzorou (2011) that a study topic should not conflict with the values of the participants, communities, and societies or create tensions and dilemmas. The topic is of public interest globally among citizens. Bryman and Bell (2007) add that a researcher should devise the best mechanism to avoid harming research participants. The other act in avoiding harm was to select adults to participate in the study. It is argued that children can only give approbation but fail to provide informed consent. The research presumably had no immediate risks; however, caution was still taken to guard against any potential risks during the study. As per the Malawian constitution, an adult is someone having attained 18 years old. Therefore, the study did not involve minors. Second, data collection was free from stress because participants were given ample prior information. This

gave participants time and space to reflect on their questions. The issue of avoiding harm when conducting research investigations is also supported by Stevens (2013) who recommended that respondents should not experience unnecessary apprehensions, personal embarrassments, and any other form of harm. Similarly, in the process of data collection, respondents were assured that their collected data were to be used for research purposes only, and therefore, the data were not to be shared or revealed to other persons. Another type of harm discussed by authors is incorrect data recording whether accidentally or on purpose. This harms research credibility and more discussion will follow under honest and research professionals in the subsequent sections. Lastly, there is evidence that researchers under UNICAF and other regulatory bodies appropriately address any of the novel ethical questions that doctoral students raise in their research planning and implementation.

Before implementing the research project, the researcher obtained informed consent from all parties involved in the research. The first consent was obtained from the Ministry of Education and the second consent was obtained from the schools where the study was undertaken. The third consent was obtained from the girls in the girls in the sampled schools. A consent form was signed between the researcher and the participants. The head teachers for each institution introduced the researcher to the girls and teachers for them to give consent. Both oral and written information was shared with the head teachers, teachers, and learners. In the case of all participants, the researcher endeavored on a one-to-one footing to obtain consent. Awareness seems to be the primary requirement for informed consent. In summary, the following were achieved, outlining a brief description of the study, description of participant activities, and duration

of participant's involvement. There was also an assurance that participation was voluntary and may be dismissed at the participant's discretion. A discussion and assurance of any potential risk as well as potential benefits were fully done.

Once the study received the review board's approval, I provided copies of my UREC approval and consent forms to the school authorities in Central West Education Division and to the Ministry of Education. With the help and guidance of UREC, I obtained consent from the participants by use of a gatekeeper letter and information sheet which was both formally and informally shared. I was willing to consider any formal ethical issues that would emerge in the field, I and respect all my informants' requests in case they chose to withdraw or decline participation. Participants had the opportunity to ask any questions at all stages of the research Process to ensure that they were fully aware of what was involved and what was expected of them. All participants at the school level were reached through the head teacher. The participants were given reasonable time to consider giving consent and to consult others where necessary. The ministry officials and the sampled institutions were reached through permission granted by the Ministry of Education.

Informed consent was also important in maintaining confidentiality and anonymity among research participants. In the study, no participants' names or the school have been mentioned and participants were told not to write their names, but instead were identified by the use of numbers. However, the confidentiality of the names of schools was limited. The names were mentioned at the time of seeking consent from the Ministry of Education. However, I made sure that information about any of the participants and the schools were not linked to their identities under any circumstance when reporting the

findings. During the entire research project, all confidential documents and data were kept in a protected place with restricted admission. In this way, respect for the privacy of data was upheld and no information was divulged the information to any other third parties as well.

Dean and Hintz (2020) noted that there are few guidelines in the public domain for reporting back research findings to participants despite great interest participants often have to know about the results of the studies in which they were involved. It is against this fact that the two authors place the onus for reverting the study findings to the participants on the researchers as an ethical obligation for communication with professional colleagues. Resnik (2020) urges researchers to be honest in reporting all scientific communications. To this effect, the researcher reported the study design and procedures, data collection, recording, and reporting data accurately so that the research findings become credible to be acceptable. Resnik further warned against fabricating and misrepresenting data to mislead fellow professionals and the public.

In action research, the researcher plays the facillator's role and collaborates with a variety of stakeholders and address issues that have an impact on the community. The researchers' primary responsibility in this study was to enable the administration of questionnaires, focus groups, interviews, and the gathering of data from documents to guide activities. The researcher's job according to Gaillet and Gugliemo (2014), is to determine the subject and study area that need to be enhanced in the educational environment.

The first step was to define the issue and create a set of research questions that would use as the foundation for the study. The following phase involved conducting a study

of the literature on females' academic attainment and then developing research on the gasp found. It was a really difficult challenge to find information regarding how well ladies performed academically in the schools with boarding facilities for boys. The majority of the literature that was available, however, only featured compared study themes. It was difficult to conduct a thorough assessment of the literature and to administer the research tools to collect data, especially if the researcher had no prior research experience. From the afore mentioned declaration, it may be inferred that the researcher's educational experiences aided in resolving some of the difficulties in examining academic accomplishment among girls in secondary schools with boys only as boarders.

The researcher was exceedingly motivated to investigate the academic performance among girls in boys boarding facilities secondary schools in Malawi because society seems to marginalize girls. This takes the fact that there are reportedly many people lacking opportunities, access to essential services, and decent living standards (Bhatia et, al. 2017, p. 2). It is argued that progress could only be achieved when even those on the margins share the benefit of progress (SC, IDS & UNESCO, 2016). The interest has been rising based on personal experiences as a professional teacher having worked at primary school, secondary school, and university levels; where it is seen that girls' education faces hurdles that need to be addressed. With this experience, there was a strong stand to remove any subjectivity which could in either way influence research study findings. It was, therefore, important to resort to bracketing at this juncture. Creswell (2003) as cited in Maitra and Weatherford (2019) recommended the use of bracketing as a way of disassociating oneself from own experiences in an investigation. All the preconceptions on educational experiences about girls' education were taken out to avoid

the issues of subjectivity and biases that result in misrepresenting of findings, thereby making the study less credible. Research participants were more partners than subjects, and their data which was designed to be collected in confidence was checked with them to ensure clarity and confidence for public release. Therefore, the process gave participants the right to access their data and the freedom to decide whether to retain data in confidence if they feel it might affect them negatively. This will be achieved by keeping records so that every participant's data is stored as personal data which can be demanded by the participant.

Data Collection and Analysis

This section is about data analysis as shown above. It includes a detailed description of the data that was collected and the processes and steps used in gathering the data. It then also considers how the data were coded and there was no use of any coding software. There was initial coding and a description of the contents of the answers were marked in different types of ink colours. The alongside the initial coding were some notes in a dissimilar colour which are referred as the memos. The aim of coding and using the memos was to achieve comprehensive responses to the research questions. Quantitative research is less detailed than qualitative research, but it has a broader reach and a more generalized level of application of justification (Payne & Payne, 2004).

It has been stated that the purpose of relocating schools closer to neighbourhoods was to shorten travel times to the schools. Given that numerous polls have linked large distances to school with girls' lack of attendance, this was probably especially advantageous for girls (Bendera, Gordon, Kadzamira, Swainson, 1998). The promotion

of girls' academic success in schools depends on the design and implementation of female education policies as policy interventions. In this sense, the new investment policy may have an impact on both the learning processes and expectations of females attending schools with boys boarding facilities. Therefore, it is reasonable to anticipate that participants in this survey, including students, subject instructors, head teachers, and policy makers, may also feel similarly regarding the policy's effects on girls attending schools with boys' residential facilities. The researcher wanted to know how much these participants believed that the new investment had a favourable impact on the girls' academic achievement in the MSCE and university selection.

Inductive Data Analysis

A detailed account of how female students at schools with boarding facilities for boys regarded the reasons for their academic underachievement was provided by the qualitative analysis of these data using an inductive methodology as illustrated by Hatch (2002). The responses to these questions were divided using emergent sub-themes and were later turned into themes to give a thorough account of how teachers, head-teachers, female students, and policymakers think contributes to girls' poor academic performance in institutions with male residential facilities

Once these themes had been identified, the focus group discussion transcripts, open-ended questionnaire responses, and interview transcripts were all examined in order to code statements that fell within these themes. The researcher engaged himself in the data during this process, looked into the various meaning categories it provided, and then returned to the processes to verify the accuracy of this description as provided by Hatch (2002). According to Johnson and Christensen (2004), researcher needed

to become conversant with the subtleties and particulars of the data and this was a process which is driven by researcher's analytical principles by exploring and confirming that gathered data.

Statistical Analysis

To establish and corroborate the answers provided in the questionnaire, interviews, and focus group discussion, the researcher did a document analysis using published MSCE results obtained from the Malawi National Examinations Board through the studied schools. According to Cohen, et al. (2007), a lot of statistical studies are based on the concept of statistical significance, which Kirk (1999: 337) defined as "a result for which chance is an implausible explanation." The researcher in this study used a T-test analysis to determine the significance levels through hypothesis testing. The t-test was selected because it was believed that the quantitative data that was acquired would have a normal distribution and no outliers. In order to prevent the researcher from relying on personal opinions, a statistical test was conducted to demonstrate that two numbers are significantly different (Moore, Notz & Flinger, 2021).

Data Triangulation

Triangulation is one of the four kinds of mixed-methods study designs, according to Creswell and Plato Clark's 2007 analysis. Individual conducting the studies are compelled to consider both types of data as equally important in answering the research question, which is the justification for any research design. By comparing the outcomes of the quantitative and qualitative analyses, data is combined, and analysed results at the same time in order to respond to the study topic.

According to Charles and Mertler (2008), this approach allows the researcher to integrate the advantages of each type of data because both quantitative and qualitative data are gathered and given equal weight. Previously, Patton (2001) promoted the use of triangulation by claiming that by combining several methods, including both quantitative and qualitative research approaches, triangulation enriches a study. This method is usually chosen when a researcher designs to treat both types of data equal and according to the research topic. Although computer-based classification of the qualitative data would have been very helpful, the researcher was more familiar with manually thematic coding. This made it possible to combine the qualitative and quantitative data more effectively and aggressively.

In the first place, the researcher counted number of girls that passed MSCE and those selected for public university education and calculated percentages and made comparisons between schools. In the second process, the researcher identified the types of relationships and sort those into categories and themes. This process yielded results which could not be obtained through the analysis of one dataset and therefore the data was easily compared against each group for correct interpretation. These two methods are important because Cresswell & Plano Clark (2007) alluded to the fact that during interpretation, the researcher finds it easy "to directly compare and contrast quantitative statistical results with qualitative findings" (p. 62) in order to develop reliable and well-supported findings concerning the issue being investigated.

Collection of Qualitative Data

Interviews with 11 open-ended questions were conducted with the two policy makers in the Ministry of Education and 11 open-ended questions with the 24 female

leaners. Participants were not given a copy of the interview in advance, but they had prior broad idea of the topic. The answers to interview questions were utilised to extract pertinent topics and look for any trends that may have formed among the responses from policymakers and students. 24 female students were separated into 4 groups of six for the focus groups, which consisted of 7 open-ended questions. The dialogues were utilized to pinpoint pertinent ideas that came out during interactions with the students and to spot potential patterns in the four groups' responses.

Collection of Quantitative Data

Quantitative data of the study were obtained from some items in the questionnaire. The questionnaires were designed for participants to be filled between 15 and 20 minutes, and surveying occurred only once for each of the four head teachers and 24 female learners. Finally, the 2010-2019 Malawi School Certificate Education examinations grades and the 2010-2019 public university selection rate were collected from each of the sampled schools.

Content Analysis

Parveen and Showkat (2017, p. 37) rightly described content analysis as an interpretation of what a message contains. The study utilized written texts from the questionnaires and oral text from interviews and focus group discussions which were later turned into written transcripts. There were a few simple steps used to conduct the whole process of content analysis. Firstly, I needed to identify and understand the research question. Secondly, there was a need to select the sample from which to analyze its data. The third step involved identifying a list of main themes intended for analysis. Through the identified themes it was possible to classify the content accordingly. The merit in

using qualitative analysis of the content was easy to quantify the themes by simply counting the frequencies

Summary

An interpretation of what a message contains. The study utilized written texts This action case study compared the learning environments at district boarding secondary schools and boys boarding facilities secondary schools in a few secondary schools in the Central West Education Division between 2010 and 2019. According to reports, the marginalization of girls has led to unequal learning opportunities between boys and girls, contributing to the low success levels in the majority of underdeveloped countries (World Bank, 2018). By examining if there are any academic performance gaps between girls in secondary boys' boarding facilities and girls in district boarding schools, this research study seeks to determine whether girls boarding facilities should be offered in boys boarding facilities.

The study used both qualitative and quantitative methods. A mixed-methods study was chosen as the design for this research to enable an in-depth exploration of how boarding facilities may influence learners' MSCE pass rate and public university selection as they join either district boarding facilities school or boys boarding facilities schools. The selection of the appropriate research approach in this study was based on the problem of interest. For instance, Robertson et al. (2019) cited girls' access to high-quality education as features prominently in Malawi's National Girls' Education Strategy (NGES). The use of mixed research methods is well supported by Warfa (2016) in a study Mixed-Methods Design in Biology Education Research: Approach and Uses. The motive behind the use of mixed methods was supported by Creswell (2009) that

"a researcher can collect the two types of data simultaneously, during a single data collection phase" (p. 216). Therefore, the researcher brings in an interpretive perspective to escalate the understanding of the critical, social and organizational concerns related to the adaptation and adoption of the new investment policy in Malawi secondary schools.

According to Lewis, Saunders, and Thornhill (2009), a research strategy is defined as the general plan used by a researcher in answering research questions. Bryman (2008) called research strategy the general direction in which the research takes. In this doctoral study, the research strategy provided an overall direction and the processes involved in the investigation of how girls in boys boarding facilities schools performed during the MSCE national examinations and public university selection. An action research case study has been the best strategy for fulfilling the set research objectives and answering the research questions. Wiśniewska (2011), argued that the use of mixed research methods is not a strange phenomenon in action research studies.

Research participants in the sample were selected to meet specific criteria and had to be educationists willing to participate, be 18 years and above years, and be from either a district boarding facilities school or boys boarding facilities secondary schools. The head teachers, subject teachers, and ministry officials hold varied educational and professional experiences which significantly enriched research findings in the final stage. Form four female participants were well placed to describe the events taking place in school that relate to girls' academic achievement after staying close to four years at a secondary school. The study used girls that were in the schools at that time because those girls that completed school in the years 2010 to 2019 could not have been easily

reached. This was how the convenience type of sampling technique became helpful. Bhardwaj (2019), among other scholars, argued that convenience sampling is used to select only those research participants that are easily accessible to the researcher. The sample participants were selected explicitly to encompass instances in which the phenomena under study were likely to be found. According to Patton (1990), the approach to sample design was consistent with the strategy of homogeneous sampling, where the anticipated results come from the description of some particular subgroup indepth (Patton, 1990).

Patton (1990) described these types of sampling techniques as non-probability sampling techniques. Purposive sampling was used because the study involved academic matters and therefore the researcher planned to gather data from the angle of school leadership, subject teachers, the female learners, and educational policy makers. Etikan, Musa, and Alkassim (2016) called this "Maximum Variation Sampling". As observed the participants are brought from all available angles, thereby making the group heterogeneous. The sampling technique involved selecting participants across diverse characteristics in a population. For this study, I analyzed the data collected from questionnaires, interviews, focus groups, and documents. This meant that a single research method was quite insufficient and therefore a multi-method approach was appropriate to fully address the research questions.

An ideal research tool needed to be designed in a way that accurately measured the intended concept under investigation (Mohajan, 2017). A keen grasp and application of the tools should eventually bring up useful and meaningful findings to the targeted audience were to be reliable and valid. Content validity was achieved through an

authenticated amount of review literature on girl child education. The face validity was established through a review of the instrument by experts in this field. For instance, the supervisor and other research experts professionally scrutinized the tools and gave their impressions regarding the relevance and contents. The critical examination of the tools, objective feedback, and suggestions made by the supervisor was sufficient to increase the research's validity.

Several studies have shown that reliability is about the consistency of research findings and that the results are acceptable and depended upon (Coleman & Brings 2001; Black, 1999). The word construct refers to the skill, knowledge, attribute, or attitude which is being investigated (Slaney & Racine, 2013). The bias in measurement if not corrected yields poor results for the sample. Ross (2015) argued that operational definitions define a way in which a variable is a process of measuring. Researchers have argued that the absence of a link between a variable and an operational definition makes it difficult to assess and interpret the data and fails to answer the research questions. The study used pass rate as the key assessment calculated from the high stake MSCE. The MSCE is the only available academic achievement measure at the final stage in secondary school progress records. This article defined low and high pass rates and explained how each term was used.

Dooly, Moore, and Vallejo, (2017) argue that research studies in educational contexts, just like any other study requires strict adherence to ethical matters because of the involvement of human subjects. Akaranga and Kamu, (2016) add to Dooly's point by noting ethical adherence supports the main aims of the research by providing accurate data on which decisions are based. It is therefore important that a researcher be

conversant with all basic ethical principles and knowledge about policies and procedures in safeguarding participants. The other reason for adherence to research ethics was to gain public trust so that no part of the research project contravened the policies and procedures.

As stated by Creswell (2007), data from action research usually come from focus group discussions, interviews, documents, and questionnaires. For instance, a simple statistical analysis was conducted to compare examination passing rates between girls in boys boarding facilities schools and girls in district boarding facilities schools over the years. Using Charts Excel, several different charts were drawn, based on the type of data that were selected. Descriptive graphs were plotted to show trends over years in secondary school categories versus examination passing rates. Parveen and Showkat (2017) rightly describe the content analysis as from the questionnaires and oral text from interviews and focus group discussions which were later turned into written transcripts to inform the interpretation.

CHAPTER 4: FINDINGS

The purpose of this action research study was to gain a better understanding of how girls in boys boarding facilities secondary schools perform at Malawi School Certificate Education examinations when compared with their counterparts in district boarding facilities schools. Malawi government realizes that without making significant investments in girls' secondary school education and encouraging female learners to attend secondary school education across the country, girls will continue facing problems at all levels at school, community, or even at home (MESA, 2019, p. 51). As a result, female learners in boys boarding facilities school continue to be marginalized from quality secondary school education, resulting in a wide academic gap between girls in district boarding facilities secondary schools and girls in boys boarding facilities secondary schools. This study is significant given that day schools are considered to be more accessible but inefficient while boarding schools are less accessible but efficient (Joshua & Zachariah, 2016). Findings from the study by Joshua and Zachariah (2016) were summarized as follows;

Students in boarding schools generally have better study facilities, receive professional and more supervisory support, long-distance walks to school have a negative impact on student performance, and lastly, students in boarding schools have more time available for their studies (p. 111).

In Malawi, boarding school facilities form a critical part of the secondary school learning environment for one to attain quality secondary education. It is now clear that investment remedies to girls' secondary school education have been insufficient making the schools unimproved and less attractive for the girls to remain in boys boarding

facilities secondary schools. It is revealed that this field of academic study seems to have more researched publications available from which informed decisions can be made when deciding the types of educational investments to venture into. However, there has never been a conclusive result on girls' academic performance that benchmarks appropriate practices for the girl child's education in boys boarding facilities secondary schools. This is more reason for continuous search in this field. The findings of this study are expected to support the idea that, boarding schools are the foremost educational opportunities for a lot of students in the Malawi setting because "boarding schools provide an academic environment designed for formal social skills development more naturally than in an artificial way" (Jampel, 2016, p. 30) as cited in (Murdowo, 2017). Consequently, the type and standard of the school facilities can considerably impact learners' achievement.

This chapter presents the findings obtained from the analysis of the data collected in the study through interviews, focus group discussions questionnaires, and public records. The findings in this chapter were based on MSCE examinations' official statistical data, views, and understanding of the respondents concerning girls' academic performance during terminal national examinations which were administered by the Malawi National Examinations Board from 2010 to 2019.

The problem of girls' poor academic performance cannot go unnoticed in societies that value the importance of female education. In this action research case study, an investigation and analysis of two different learning environments were brought into the spotlight. Literature has reported that low academic achievement levels in most developing countries have been due to the marginalization of girls evidenced by reduced

learning opportunities between boys and girls (World Bank 2018). In this research, girls were identified as both vulnerable and marginalized even though girls seem to be potentially productive in society. The assumption has therefore been that girls' education in Malawi meets the hardest obstacles that need more than political powers for the country to start leaping more fruits from investments that are made in the education sector. Utilizing the data collected through this research, it is argued that developing affirmative education policies such as the new investment policy and, more specifically, providing girls with boarding facilities is of paramount importance if Malawi is to make progress toward the social change agenda and girls academic excellence as expressed by teachers and learners participating in this research.

Increasing access to female secondary school education while limiting boarding facilities to the girls, seem not ideal for Malawi's ambition to achieve The Agenda 2030. Additionally, the anticipation that investment in education and skills would lead to job creation, growth, and reductions in inequality may as well not materialize. The experience of Malawi suggests that on its own, supply-side secondary education development has been insufficient for meeting gender equality. To this effect the action research case study aimed at establishing whether girls boarding facilities were needed to be provided in boys boarding facilities. Boys boarding facilities schools are by design responsible for the provision of boys' accommodation only; whereas girls are not provided accommodation, but operate as day scholars.

The first specific question aimed at finding out if there were any academic performance gaps between girls in boys boarding facilities secondary and girls in district boarding schools. This takes the fact that secondary schools in Malawi are in

differentiated categories. The second one wanted to understand the factors that contributed to the academic difference between the two school models through conducting a PESTEL analysis to come up with political, economic, social, technological, environmental, and legal factors at play. PESTEL was more appropriate than a SWOT model because the former approach formed a much more comprehensive version of the latter. The third question wanted to find out the available principles and guidelines used to support girls that were selected for boys boarding facilities school. This took cognizant that district boarding facilities were differentiated from boys boarding facilities schools and therefore, there must have been deliberate efforts to address shortfalls in boys boarding facilities schools. The study, therefore, looked at the extent to which boarding facilities add value to the learning environment for the success of the learners. The table below summaries the three sub-questions as follows;

Table 4.1

Table 4. 1 Summary Table Linking the Premises to Each Research Question

Premise	Research question
Eligible girls for secondary school	How do girls in boys boarding
could not be segregated	facilities school perform during
	MSCE and public university
	selection when compared to their
	counterparts in district boarding
	schools?

Girls would access secondary	What are the factors contributing to
school education without being	these differences?
subjected to inequalities.	
Female students need to develop	To what extent does the Ministry of
resilience whilst in boys boarding	Education manage girls that are
facilities school	selected for boys boarding
	secondary schools in the context of
	the new investment policy?

Chapter four is divided into seven sections. Each section carries specific contents, such that, section one gives a brief discussion on the overview of the research study and the organization of the whole chapter. Section two discusses the trustworthiness of the data which were collected, analyzed, and interpreted. This forms the most important part of the study for accurate reporting and dissemination of the findings. The section covers areas such as credibility, transferability, dependability, and confirmability of the research study. Section three reports on how reliability and validity were achieved and points out the importance of analyzing the appropriateness, meaningfulness, and usefulness of a research study. The issue of the consistency of a research study's measurement instrument was well guided under the theme of reliability. Section four presents the results which are in two parts. The first part is primary data which comprises immediate information gleaned from interviews, focus group discussions and questionnaires and the second part contains secondary data. This is data gleaned from secondary sources such as public records from which MSCE examination grades and public university selection

were taken. The results section flows in a systematic order by following the order of the research questions and the structure of analysis as arranged in parallel to the structures of the introduction and methodology chapters. Section five forms the main part of the chapter because it answers the research questions in their numerical order. Section six gives the interpretation of the result in light of the theories, approaches, and the cited literature view from chapter two. Section seven gives a summary of the whole chapter.

Trustworthiness of Data

Even though several scholars seem not to agree on the definition of trustworthiness in a research study (Leung, 2015) noted that the concept remains a relevant research tool in determining the quality of research findings. In this regard, Cope (2014, p. 90) attempted to define the trustworthiness of research as "the truth and transparency of research findings" which normally is a result of reporting precisely about participants' views.

Trustworthiness of data forms a section that introduces some of the indispensable indicators of a high-quality research paper. It involves a detailed description of the research processes, which include the research context, research aims, questions and design, theoretical concepts, and the methods of data collection and data analysis, result, and discussion (Bennet, Kajamaa & Stenfors, 2020). It has also been argued that the way data is collected from participants and interpreted not only determines the levels of confidence but also the quality of the research findings (Pilot & Beck, 2014). In this regard, a set of research approaches were utilized in studying the topic. However, this particular approach was problematic because such an approach results in many emerging patterns in the data (Fairhurst, 2014). Nevertheless, the problem was successfully addressed by

carefully identifying the codes, the patterns, and the emerging themes. The advantage of combined data collection methods brought a more robust understanding of the girls' problems they encounter whilst learning in boys boarding facilities schools.

The section below attempts to address issues of trustworthiness about the five criteria offered by Lincoln and Guba (1985) as cited by King & Stahl (2020) in "Understanding and Using Trustworthiness in Qualitative Research" who said that "each investigator bears the onus of demonstrating how the qualitative or action-oriented study meets standard conventions for trustworthiness so that the work might serve the needs of those who are consumers of that research" (p. 28).

Credibility

The study used several data gathering methods, namely, interviews, focus group discussions, self-administered questionnaires, and a review of documents. However, each of the methods provided unique challenges, from which the decision to combine methods was hatched. The data that was gathered through the combined methods were key to achieving the credibility of the findings. Therefore, it could not have counted much to collect as much data as possible and only to discover that the data was not diverse in nature to make the study findings credible. More important was the robust literature searches on topics related to the research topic that was conducted that contributed the study's credibility (Portugal, 2017). In this regard, a literature search on girls' academic performance in Malawi and other parts of the world was thoroughly conducted to guide direction of the study. Using the knowledge from the literature review it was easy to establish what others found out about girls' academic performance in secondary schools and from there build up knowledge from the existing research findings and debates

regarding girls' performance in boys boarding facilities schools. The school setting in which this study was conducted provided learners' real experiences which were used to build new knowledge relating to girls' academic performance in boys boarding facilities schools. Streubert and Carpenter (1999), advanced an argument that studying participants in their natural setting has the potential to increase research's credibility.

The process of achieving research credibility was not only robust but also professional because it involved reporting on every research step that was undertaken. This included the development of research derived from a complete and comprehensive conceptual framework related to girls' achievement. The research tools were developed by involving other colleagues in the academia to check the content and structure before sending to the supervisor. The tools were then reviewed by the supervisor and UREC. Their observations and recommendations were finally incorporated into the final submission. For instance, it was recommended that the term "contributing factor" needed to be "factors contributing". This was an appropriate term to use for the Anti-Deficit Achievement Model. In a deficit thinking model, the blame goes to the learners because female students are perceived to be lower achievers (Davis and Museus, 2019); as a result, governments and policymakers are less likely to provide girls boarding facilities in boys boarding facilities schools to support their education, causing female students to perform poorly in their studies. Upon sending the refined tools to UREC for final checking, consent was given for data to be collected.

Each group of participants was given the same kind of questions and in the same order. This was important for the sake of easy reach of data saturation which enriched the research findings. The process of data collection began on 27th April 2020 and ran

through to 30th May 2020 as indicated in chapter three. However, before engaging in the process of data collection, the researcher had already established contacts with the participants. According to Cope (2014), continued engagement helps in not only building trust but also rapport with all research participants to garner rich and detailed responses. Therefore, the process of data collection and analysis was an ongoing process that required constant contact with research participants.

According to Bana-Akutey and Tiimub (2021) triangulation is the process of using multiple sources of data to conclude a study. Interviews and focus group discussions allowed female secondary school learners from different experiences and school backgrounds to express their views on a topic relating to girls' academic achievement. Data were analyzed independently of each other and this avoided bias. The data went through a comparison process to generate a common analysis from the participants. The language to be used in representing the finding was therefore carefully selected and this greatly improved the objectivity of the research study. The exercise involved brainstorming terms that were related to girls' academic performance until no other related words appeared.

Transferability

According to Moon, Brewer, Januchowski-Hartley, Adams, and Blackman (2016), transferability is frequently underdeveloped in terms of triangulation methods and sample suitability for answering the research. Based on this, the authors created a guideline for improving qualitative social science publications, particularly in the fields of ecology and conservation journals, in order to allow proper research findings application and decision making. Burchett, Mayhew, Lavis and Dobrow (2013) shared the same views of research

transferability as complex and poorly understood. Based on the above observations, it can better be argued that the issues of whether research findings can be transferrable or not do not only depend on the researcher alone but also on other readers as well. It is for this reason that, the methods, and procedures used in this study were clearly outlined from the choice of the topic of study to the reporting stage of the project. In the process, convenient sampling techniques were used in the selection of sample members using their knowledge, relationships, and expertise about the research topic. Within this context, a total of 102 participants were identified and they comprised 72 female students in the fourth year, 24 subject teachers, 4 secondary school head teachers drawn from secondary schools within the Central West Education Division, and 2 Ministry of Education Officials. The female participants were sent the questionnaire for completion through WhatsApp; and returned the completed questionnaire via the same WhatsApp to the researcher. Furthermore, the process did not confine the participants to a space to complete the questionnaire. Questions for focus group discussion were posted on the forum and discussion took place on the same.

Furthermore, a detailed description of the characteristics of the respondents is provided in the final report so that other readers interested in the investigation can consider the applicability of the research findings in their setting. However, Rodon, and Sesé (2008) make caution that, "the applicability of research findings in one setting depends on the degree of comparison between the research setting in which the phenomenon studied occurs and the settings in which the results are expected to be transferable" (p. 2). This statement provides evidence that hat transferability is possible

when a clear and detailed description of the context and culture, selection, and characteristics of participants, and data collection and analysis are provided.

While Foster, et al. (2000) argued that case study findings fail to achieve transferability, nonetheless, readers can still connect the empirical findings from this study to the findings in other cases with possible explanations on how the new findings may have improved understanding of the research questions. The idea that research findings need to be transferable, is a view advocated by Marshall and Rossman (2011) among other scholars. Lincoln and Guba (1985) noted that issues of transferability are well worked after study findings have been published by those researchers who would want to make similar investigations thereafter.

For this particular study, Stake (1994) argues that some investigations are carried out to make an investigation of particular cases for their own sake. In this respect, the current study was carried out for its intrinsic value. For instance, the central concern in this study was to find out whether the new investment policy being implemented in boys boarding facilities schools achieved its goals. It is believed that such a case study would not just draw the attention of a single group of people in a particular setting but also a larger group of people in other similar settings.

Dependability

Lincoln Guba (1985), described dependability as an aspect of checking whether or not, analysis processes were done according to the acceptable standards of a chosen research design. According to other researchers, dependability is described in terms of the data being found constant in similar conditions (Polit & Beck, 2012; Tobin & Begley, 2004). The idea of achieving dependability is to allow other researchers to repeat the

same procedures and come up with similar findings as cited in Spear (2004). For this purpose, the researcher developed the subject from the early stage through a thorough literature survey on girls' performance in secondary schools in Sothern Africa and Malawi in particular. Detailed draft copies of research proposals were sent to Doctoral Team at UNICAF for comments and approval. The final draft was developed after incorporating all necessary details from comments and suggestions before seeking ethical clearance for the investigation to start. Therefore, the researcher had a well-developed research decorum that was constantly being presented to UREC and the researcher's supervisor. The process entailed that a track record for every research procedure and activity was made available for other researchers to follow the research processes. In more practical terms, the study ensured that conceptualization of the study, collection of data as well as interpretation of the data, and reporting of results were done void of errors.

Confirmability

Patton (1990) argued that the objectivity of a research study is best achieved when research tools are used autonomously to capture participants' views. In view of this, the interpretation of data was not made from own thinking, rather, it was from the informants themselves so that the interpretations reflected the 102 participants' point of view hence being relevant to the participants themselves. For this reason, direct quotes were used to demonstrate participants' experiences and ideas, rather than the characteristics and preferences of the researcher. The idea of confirmability was to avoid self-interest which normally brings about controversies in research findings. Several steps were taken to ensure that confirmability is not at stake. The steps included disclosure of the demographic characteristics of the participants, methods, techniques, and study

procedures. In addition, all reflective notes that were drawn from the field by the researcher were fully disclosed and utilized. The process enabled, the researcher to analyze and interpret data gathered in the way it was gathered. During the analysis of quantitative data, calculations of mean, arithmetical average and percentages were done to establish the type of secondary school which performed better than the other. During the analysis of qualitative data, emerging themes were identified, and shown in the patterns, and the inclusion of quotes from participants illustrated how the themes originated. In addition, data from the literature review which was consistent with the current findings were presented to acknowledge the phenomenon from previous research studies.

Reliability and Validity of Data

According to Ghazali (2016), reliability and validity of data if not carefully considered a serious methodological concern in research for the findings to be acceptable. To this effect, Drost (2011, p. 106) attempted to define reliability as "the extent to which measurements are repeatable so that even if different persons perform the measurements, on different occasions, under different conditions, with supposedly alternative instruments what is measured produce the result". Drost (2011) further defined validity as "acknowledging whether what is intended to be measured is indeed measured or else something is being measured" (p.114). According to Sarantakos (1994), validity is a methodological element in both quantitative and qualitative research studies. It is further urged that researchers need to develop research tools that can measure what is intended to measure. In this study, different questions were used to measure constructs in the quantitative and qualitative parts of the research study. The main reason for not

using the same questions in both quantitative and qualitative parts of the study was that qualitative research parts were concerned with words and meaning and considered the views of participants (Bryman, 2008). With regards to the contrasting quantitative part of the research study, the concern was on getting numbers and anchoring the interpretation based on the researcher's point of view from a research study. For instance, the quantitative part of the study was used to establish the MSCE pass rate and public universities selection among girls in each of the sampled schools, and the method of data collection included official statistical records and questionnaires. While in a qualitative part of the study, the interest was to understand factors that make girls fail to obtain Malawi School Certificate of Education certificates.

As regards the element of research reliability, Bryman (2008), described reliability as a link between a measure and a concept being studied in a research study. Bryman argues that the concept is regularly used in the question of whether the research tools that are devised for concepts in the social sciences are consistent. This is also inconsistent with Hammersley (1992) who referred to the concept of reliability as the degree of consistency with which examples are given to the same category by different investigators or by the same investigators on different occasions. Neuman (2003) argued that data can only be consistent if a researcher designs a reliable method and that the use variety of techniques such as interviews, documents, focus group discussions and questionnaires appropriately addressed the concept of consistency in this study.

As a way of ensuring that data collection is consistent, UREC and the Doctoral Team first of all approved the research proposal and the research tools. This ascertained that the research tools were developed to be able to evaluate the new investment policy

in various dimensions of evaluation. As a matter of standard practice and procedure, the instruments that were developed to be used in the study were supposed to be first assessed in a pilot study before administering them in the main study. It is for this reason that Ghazali (2016) in a write-up titled "A Reliability and Validity of an Instrument to Evaluate the School-Based Assessment System: A Pilot Study, argued that pilot studies are needed before the real studies are conducted. It is argued that one of the aims of conducting a pilot study, is to increase research quality, and this has been proved correct by several research studies (Frazer, Fahlman, Arscott, & Guillot, 2018).

The questionnaire comprised questions on demographic data related to participants' age, professional experience, institutional data, previous academic experience, distance covered when going to school, factors motivating students to learn, and ways of improving learners' performance. In addition to completing the questionnaires, interviews were conducted with three female students. At the end of the pilot study, the final version of the questionnaires was as follows; 15 questions for the head teacher, 11 questions for the subject teacher, 11 questions for the female students, and 9 interview questions for the learners. The main purpose of the pilot study was to assess the feasibility of successfully recruiting participants for the study and to evaluate the processes and instruments for the study. The pilot study gave a clear opportunity to improve the research processes.

One of the questions that always arise when the pilot study is conducted before the main study is whether to include the same participants in both pilot and main studies or include different participants in the main study. For good reasons, this current study selected different participants for the main study. One of the reasons was the nature of the study topic which required the selection of new participants from both district boarding schools and boys boarding facilities schools. In addition, the selection of new participants was never a challenge because they were readily available to participate in the investigation. However, Janghorban et al. (2014), argued that using the same participants in both the pilot study and main study is advantageous because it enhances understanding between the researcher and the participants. It is further argued that researchers and participants can act naturally in the main research study due to prior experience gained in the pilot phase. For the sake of this study, a Community Day Secondary School was chosen for the pilot study. Hence data and findings were generated from a single school and this limited generalization of the pilot findings may also affect the research's validity. According to Robichaud (2016) threat to internal validity would have been minimized during the pilot study if the recruitment of participants came from a wider set of schools across the country. Therefore, internal validity was checked in the main study through the use of different groups of participants from both district boarding schools and boys boarding facilities schools.

Additionally, UNICAF provided opportunities for peer and academic scrutiny of the research project through the "First Annual Online Unicaf University Graduate Conference (UGraC)", held on 22 and 23 March 2021. Colleagues, peers, and academics provided feedback that was vital for the improvement of the research project. Through the interaction, there is an opportunity to perfect some of the research procedures and advance grander explanations of the arguments in response to the comments made. According to Patton (1990), not only does the background, qualifications, and experience of the investigator increase credibility but also that of

colleagues, peers, and academics. The data that were gathered were being compared against each other in the absence of a legal standard measure. For instance, the researcher used words like low pass rate to mean that the achievement was low. However, the same number that could be attributed as low in one study may not be low in another study. However, this problem was minute as the researcher just wanted to compare two numbers, taking the higher number or percentage as affirmative. Additionally, the concept of reliability was also improved by comparing the analysis of the same data against other research findings in the same field of study.

Results

This section 4.3 states the findings without bias or interpretation and is arranged in a logical sequence following the methodologies as discussed in chapter three.

Demographic Data

The inclusion of this portion of demographic information enables readers and researchers to assess the scope of the study's generalizability and to compare the results of its replications. In addition, this section supplies the data needed for study synthesis and secondary data analysis (Beins, 2009).

Table 4.2 Head Teachers' Gender

Gender	Male	Female
Head teachers	4	0
Percentage	100 %	0 %

The table shows that all the four head teachers were males and no females. This points to the fact that there is less participation among females in secondary school leadership roles. Probably, affirmative education policy on women leadership empowerment may be necessary from now on.

Table 4. 3 Policy Makers' Gender

Table 4.3

Gender	Male	Female
Policy makers	1	1
Percentage	50 %	50 %

The table shows that there was one male policy maker and one female policy maker. This was well achieved because the researcher purposively targeted a male and a female policy maker in the Ministry of Education.

Table 4.4 Teachers' Gender

Gender	Male	Female
Teachers	16	8
Percentage	66.66 %	33.33 %

Out of the 24 teacher participants, 16 (66.66 %) were males and 8 (33.33 %) were females. The gender numbers still point to the fact that there are less female teacher representation in the sampled secondary schools. This is also another area where the Ministry of Education and entire government machinery start addressing so that secondary schools have more role models to improve their academic performance.

Table 4. 5 Teacher Specialization

Table 4.5

Area of specialization	Language	Sciences	Humanities
Boys boarding facilities school	2	3	7
District boarding school	3	5	4
Percentage	20.8	33.3	45.8

Teaching specialization in this study refers to a teacher's level of subject-matter expertise. Thus, subject-area specialization has the potential to improve teacher and school effectiveness by utilizing and fostering teachers' subject-matter expertise (Condie, Lefgren, & Sims, 2014; Hwang & Kisida, 2021). Therefore, as mentioned before, there are three main areas of expertise in secondary school. According to the quantitative data,

11 (45.8%) of the instructors are from the humanities department, 8 (33.3%) are from the sciences, and 5 (20%) are from the language department.

Table 4.6 Specialist Teachers

Table 4.7

School model	Number of special teachers
School A	2
School B	2
School C	1
School D	1

The table above shows distribution of certified special teachers who are responsible for assisting students that have learning difficulties such as blind and deaf.

Table 4. 7 Teachers' Educational Qualification in District Boarding Schools

Qualification	Diploma	Degree	Masters
Teachers	2	9	1
Percentage	16.6 %	75 %	8.3 %

Generally, the School of Education or Department of Education in a university provides training for secondary school teachers. This institution or department grants three different professional degrees: the University Certificate of Education, the Bachelor of Education, and the Diploma of Education. According to the qualitative data, 1 (8.3%) teacher possessed a post-degree certificate, 9 (75%) teachers were qualified for the teaching role with a degree certificate, and 2 (16.6%) instructors were qualified for

teaching role with a diploma in education. According to the data, the teachers had the necessary credentials to instruct in secondary schools in Malawi (Beytekin & Chipala, 2015).

Table 4.8

Table 4. 8 Teachers' Educational Qualification in Boys Boarding Facilities Schools

Qualification	Diploma	Degree	Masters
Teachers	3	9	0
Percentage	25 %	75 %	0

The quantitative date shows that 3 (25%) teachers were qualified to a diploma certificate and 9 (75 %) were degree certificate holders. The data re-affirm that that the teachers were adequately qualified for the task of teaching the learners in the school.

Table 4.9

Table 4. 9 Years of Teaching Experience (District Boarding Schools)

Years	0-4 yr.	5-9 yr.	10-14 yr.	15-20 yr.	21yr +
Teachers	0	1	5	3	3
Percentage	0	8.3 %	41.66 %	25 %	25 %

Teachers' years of experience in the district boarding schools show that out the 12 teachers, 1 (8.3%) the ranged in the 5-9 yrs., 5 (41.66%) were ranged in the 10-14 yrs., 3 (25%) were ranged in the 15-19yrs., and 3 (25%) were ranged 20 years plus. The majority of the teacher participants in the district boarding schools were well experienced in the range of 10-14 years of teaching experience.

 Table 4.10

 Table 4. 10 Years of Teaching Experience (Boys Boarding Facilities Schools)

Years	0-4 yr.	5-9 yr.	10-14 yr.	15-20 yr.	21yr +
Teachers	0	1	5	2	4
Percentage	0	8.3	41.66	16.66	33.33

The quantitative data shows that out of the 12 teachers, 1 (8.33 %) ranged from 5-9 years of teaching, 5 (41.66 %) ranged from 10-14 years of teaching, 2 (16.66 %), and 4 (33.33 %) were 20 years and above. The majority of the teacher participants in the boarding facilities schools were well experienced in the range of 10-14 years of teaching experience.

 Table 4.11

 Table 4. 11 Years Taught At the Current Station (District Boarding Schools)

Years	0-4 yr.	5-9 yr.	10-14 yr.	15-20 yr.	21yr +
Teachers	3	9	0	0	0
Percentage	25 %	75 %	0	0	0

Years of teaching at the district boarding school indicate that 3 (25 %) of the teachers had taught at the schools in the 0-4 yrs. ranges. The majority of the teachers had taught at the school in the 5-9 yrs. ranges. Therefore, they provided adequate information in relation to academic achievement in the MSCE and public university examinations and were also well versed with issues affecting academic achievement in

district boarding school.

Table 4.12

Table 4. 12 Years Taught At Current School (Boys Boarding Facilities Schools)

Years	0-4 yr.	5-9 yr.	10-14 yr.	15-20 yr.	21yr +
Teachers	4	8	0	0	0
Percentage	33.33 %	66.66	% 0	0	0

The quantitative data above shows that out of the 12 teachers 4 (33.33%) of the teachers were at the school in the range of 0-4 years and 8 (66.66 %) of the teachers were at the school in the range of 5-9 years. The majority of the teachers had taught at the school in the 5-9 years ranges Therefore, they provided adequate information in relation to academic achievement in the Malawi School Certificate of Education examinations and public university education and were also well versed with issues affecting girls' academic achievement in boys boarding facilities school.

When asked about the secondary school admissions process, the policy makers inclined to think that there is no difference between the girls selected to district boarding schools and girls selected to boys boarding facilities school. The same criteria are applied, including distance, catchment area, and test score. One policy maker [A] who responded to the survey made notice of a discrepancy in public's perceptions of the selection process:

"I think that in the whole selection policy, public gives more attention to boarding facilities secondary schools, than to day secondary schools."

Policy maker [B] indicated that one female student in one of the boys boarding facilities school obtained 6 points which is the last highest score one can get at Malawi

School Certificate of Education. The policy makers concurred that all students that are selected from primary school to secondary school have equal opportunity to excel.

When asked about the secondary school admissions process, female students in boys boarding facilities schools inclined to think that there is a difference between the girls selected to district boarding schools and girls selected to boys boarding facilities school. The female students believed that the ranking of candidates from the highest scoring students to low scoring students implies that girls in boys boarding facilities school are not better than those in district boarding school. Female student in school [C] who responded to the survey deduced as follows:

"Those of us who were not selected to boarding schools feel that we did not score better marks than our friends in boarding schools"

Another female student in school [D] still felt that selection criteria is not well known to the students but what they know is that there is sometimes bias in allocating students to boarding schools. She remarked the following words;

"I wonder how my friends who were not doing well in our class were selected to boarding school while some of us who were doing extremely well were all selected as day scholar at a boys boarding facilities schools."

When the girls were asked to choose between a district boarding facilities secondary school and a boys boarding facilities secondary school, they all chose a boarding school for reasons from prestige to academic benefits. One female student in school [D] reported the following:

"I was not happy when my teachers sent me a message that I was among the seven girls from my primary school who were selected to a boys boarding facilities school....after working hard I have ended up a day scholar...this wasn't my expectation".

Another student in school [C] stated that:

"Our teachers encouraged us to work hard so that we go to national secondary schools....coming here a boys boarding facilities school.....is something not pleasing"

A visit at one of the study sites showed that a borehole was completely broken and clogged and was not working.

Figure 4.1

Figure 4. 1 An Abandoned Broken Down Bore-Hole in One of the Boys Boarding Facilities Schools.



The picture above is an abandoned broken-down borehole at one of the research sites. It was important to consider the infrastructure provisions for girl which include the

state of ablution facilities and water availability whose absence exposure the girls to great health and hygiene risks.

During the focus discussion, I paused a question to find out why the borehole was in that state of appearance. The responses were;

"It requires more money to have it repaired"

One member added that

"Even if there were money, we have been told it is beyond repair"

The situation sounded hopeless for the girls to have the bore hole supplying water in the school. This should be an aggravating factor for girls not like studying in boys boarding facilities secondary school.

It was vehemently indicated during the focus group discussions that

"...going to toilets here at school is because there is it the call of nature... because after using the toilet there is no water nearby to use...."

Another girl commented that

"It is so painful especially during menstruation when girls need to use the toilets more often...... this is more the reason that girls just stay at home when experiencing periods because the nature of the toilets and unavailability of water"

The image below depicts the situation of non-habitable pit latrines, which the girls described as a source of embarrassment for girls in modern society. These pit latrines are popular in rural primary schools, but they are not to be seen in secondary schools. The difficulty with pit latrines is that they retain odours since they are constructed without openings for the polluted air to escape. Pit latrines are particularly dangerous during the wet season. During the wet season, most pit latrines collapse due to unstable terrain.

Some of the females stated that they do not use the pit latrines while it is raining, but instead try to prepare as much as possible at home.

Figure 4.2 A Pit Latrine for the Girls at One of the Boys Boarding Facilities School



The state of affairs in boys boarding schools seem to point to the fact that resources gaps are there in almost all Malawian Schools. In this regard one learner lamented that "There are no resources available. We do have a little contribution of money which is called parents' teachers funds by every student but we are told it is not enough to provide any kind of meaningful or any special services for girls."

When female students in district boarding schools were asked if ever, they experienced any challenges while staying in the hostels that affect your academic performance, they responded that they do not encounter major challenges for instance, on responded had this to say;

"I am happy to be selected at this school where there are girls' hostels because this was my dream not to go to a community day school"

Other students reported that;

"Boarding school has trained me to be myself and plan for my studiesof course with the help of teachers, I am assured of improved academic achievement"

In addition, the respondents alluded to the fact that, they are safe from the insecurity that happens outside the school campus and that they have ample time to study notes. They further indicated that being selected to a district boarding school was a motivating factor for them to work hard in their studies.

Response Rate

By simply dividing the total number of people in the sample who were eligible to participate but did not take part in the study by the number of people who actually participated in the interviews, focus groups, and survey, the response rate was calculated. Mitchell (1989) makes the claim that the survey response rate should be computed as the number of returned questionnaires divided by the total sample that was initially supplied in the survey with support from other sources. In fact, Atrostic and Burt (1999) discovered that research participants' overall response rates have been declining since the 1990s. But recent studies have shown that metrics from surveys with response rates as low as 20% are more accurate than those from surveys with greater response rates of around 60%. Since Nguyen (2007) contends that the possibility of such bias grows as the rate lowers, a high survey response rate helps to ensure that the survey results are representative of the survey population. In order to successfully obtain responses, researchers must take into account the audience, the quantity of questionnaires, the

length of the questions (which influences how long it will take someone to complete out the questionnaires), and the purpose of the survey.

It was necessary to apply for institutional approval at the Ministry of Education Headquarters prior to data collection because the study sought to ask public schools in the West Education Division to participate in the research. An application for institutional approval at that institution was absolutely necessary to have access to all research participants.

Response Rate for the Interviews with Policy Makers

The researcher contacted two policy makers who agreed to participate in the study. The consent form was sent and signed. The response rate for the interview was 100 %, which is considered a good response rate. Making valid, trustworthy, and generalizable inferences about populations based on sampled respondents' responses was the main goal of telephone surveys. As a result, the two decision-makers were first appropriately chosen from the target demographic after learning about their experience and professional knowledge with the topic at hand.

Two policy makers were purposively chosen to participate in the interviews. There were a man and a woman holding different positions but both are policy makers. The aim of the interview was to gain initial assessment new investment policy, the perceptions, and the thoughts about how the policy has impacted on the girls' academic performance. The response rate was 100 %.

Table 4.13

Table 4. 13 Response Rate for Policy Makers

Organization	policymaker	agreed to participate	response rate
MoE (Division)	1	yes	100 %
MoE (Headquarte	rs.) 1	yes	100 %

According to Oppenheim (1992, pp. 81–82) for an interview session to get higher response rate there is need to get respondents more involved and motivated. In this study, the policy makers were prior booked for consent and were told what the researcher expected from them. After following the above procedure, the response rate was 100 %.

Response Rate for the Interviews with the Girls

Each school contributed six girls to participate in the interviews making a total of 24 girls. They were given consent forms which were signed and kept by the researcher. However, on the dates of conducting interviews, some learners were out of reached.

Table 4.14

Table 4. 14 Response Rate for Girls' Interviews

School I	earners agree	d to participate	failed to participate	response rate
School A	6	yes	1	83.3 %
School B	6	yes	3	50 %
School C	6	yes	1	83.3 %
School D	6	yes	2	66.66 %

The interview under analysis was conducted involving 6 female learners from each sampled schools. The 7 questions focused on understanding the girls' impression and their beliefs about their academic performance and the motivating factors behind the performances. The response rate among participants that were involved in interviews was 70.81 %. Schutt (2016) cautioned that generally, a low response rate indicates that the samples used may produce results that are skewed or unrepresentative and this undermine the validity of what the researchers intends to measure. Therefore, a response rate of up to 70.81 % is acceptable to be used in data analysis.

Response Rate Focus Group Discussion with Girls

There were 7 open-ended questions for focus group discussions and they were useful to triangulate with other forms of data collection such as interviews and questionnaire.

Table 4.15

Table 4. 15 Response Rate for Girls' Focus Group

School	learners	agreed to participate	failed to participate	response r	ate
School A	6	yes	1	83.3	%
School B	6	S yes	3	50	%
School C	6	S yes	1	83.3	%
School D	6	S yes	1	83.3	%

There were 7 open-ended questions that were conducted in a series of online focus group discussion with a purposive sample of female learners in district and boys boarding facilities schools whose response rate was 74.97 %. Free data was provided to the participants for them to participate in the discussion. The focus guide was developed

from the new investment policy statement and relevant literature. A total of 24 female learners in 4 focus groups with 6 participants in each group was deployed.

Table 4. 16 Response Rate Self-Completing Questionnaires with Girls

Table 4.16

School	learners	agreed to complete	failed to return	response rate
School A	6	yes	1	83.3 %
School B	6	yes	2	66.66 %
School C	6	yes	1	83.3 %
School D	6	yes	1	83.33 %

There were 11 open-ended questions for the survey for the girls to complete. Although the National Research Council (2013) stated that, the response rates to surveys have been declining over the last 30 years, the response rate for the girls who participated in the above survey show a much improved response rate. The study achieved 79.14 % response rate. Sending participants a free data bundle and making the questions engaging by keeping them brief and to the point were the main strategies used in the survey to enhance response rates.

Response rate self-completing questionnaires with teachers

The 11 open ended questionnaires were hand delivered in the schools and the researcher allowed the respondents to complete the questionnaire in private in the absence of the researcher. This gave the respondents enough time to complete the questionnaires. This was advantageous as the respondents were well place, to be in familiar surroundings and void of potential threat or pressure from the researcher (Cohen,

Manion & Morrison, 2018). There were 11 open-ended questions for the subject teachers to respond as follows;

Table 4.17

Table 4. 17 Response Rate for Teachers' Questionnaire

School	teachers	agreed to complete	failed to return	response rate
School A	6	yes	0	100 %
School B	6	yes	0	100 %
School C	6	yes	0	100 %
School D	6	yes	0	100 %

The response for the survey among teachers was 100 %.

Response Rate Self-Completing Questionnaires with Head Teachers

The researcher designed to collect data from the head teachers by use of 15 open ended survey questions. The questionnaire requested for the provision of both qualitative and quantitative. The advantage was that the questionnaires were administered without the presence of the researcher and that the collected data was easy to analyze. The response rate among teachers was 100 %.

Table 4. 18 Response for Self-Completing Questionnaire to Head Teachers

School He	ad teachers	agreed to complete	failed to return	response rate
		·		·
School A	1	yes	0	100 %
		,		
School B	1	yes	0	100 %
Ochool B	'	ycs	O	100 /0
Cabaal C	4		0	400.0/
School C	I	yes	0	100 %
School D	1	yes	0	100 %

This study, which aims to investigate the girls' academic achievements in boys boarding facilities secondary school. The results consists of quantitative values and qualitative which are given in the tables below.

Research Question One

Table 4.18

Research question one to establish if girls in district boarding schools performed better that the girls in boys boarding facilities schools. Hypothesis testing was crucial in determining whether the data obtained supported the claims or predictions. Hypothesis testing is a methodical strategy to evaluate claims or theories about a population or group in a research study.

The following data illustrates the academic gaps that exist between the two school models.

Table 4.19

Table 4. 19 Girls' Pass Rate in the Two Sampled District Boarding Schools

No. of students who sat for examination	School A	School B	Total
	744	694	1438(100)
No. of students who passed the examina	tion 512	457	969
Pass %	(68.81)	(65.85)	(67.38)
No. of students who didn't pass the exam	nination 232	237	470
Failure %	(31.18)	(34.15)	(32.62)

As it has been seen in table 4.19 above a total of 744 girls who sat for the examination in School A, 512 girls passed the examination which represented 68.8 % whereas out of a total of 695 girls in School B who sat for the Malawi School Certificate of Education examinations, 457 girls passed the examination which represented 65.7%. The average pass percent for the two schools was 67.38 %. This means that 32.62 % of the girls from the two schools failed the Malawi School Certificate of Education examinations.

Table 4. 20 Girls' Examination Pass Rate in the Two Sampled Boys Boarding Facilities Schools

No. of students who sat for examination	School C	School D	Total
	450	520	970(100)
No. of students who passed the examinat	tion 289	297	586
Pass %	(64.22)	(57.11)	(60.4)
No. of students who didn't pass the exam	ination 161	223	424
Failure %	(35.77)	(42.88)	(39.6)

Table 4.20

As it has been seen in table 4.20 above, a total of 450 girls who sat for the examination in School C, 289 girls passed the examination which represented 64.22 % whereas out of a total of 521 girls in School D who sat for the Malawi School Certificate of Education examinations, 297 girls passed the examination which represented 57 %. The average pass percent for the two schools was 60.4 %. This means that 39.6 % of the girls from the two schools failed the Malawi School Certificate of Education examinations.

Table 4.19 shows higher examination pass rate 67.28 % and a lower failure rate at 32.72 % in district boarding facilities schools and table 4.20 shows lower examination pass rate at 60.4 % and higher failure rate at 39.6 % in boys boarding facilities schools. The result indicate existence of academic gap between the two school models. The academic gaps among the four sampled schools in the two school models are illustrated in the sections that follow below.

In order to check statistical significance of the academic gaps between the two school models, a null hypothesis "there is no academic difference between girls selected

in boys boarding facilities schools and the girls selected in district boarding schools" was tested as below.

Ho....hypothesis

Malawi School Certificate of Education examination pass rate among girls in boys boarding facilities schools is not the same as girls' performance in district boarding schools.

Ha....hypothesis

Table 4.21

Malawi School Certificate of Education examination pass rate among girls in boys boarding facilities schools is the same as girls in district boarding schools.

Table 4. 21 T-Test MSCE Pass Rate between the two school models

A and B	C and D			
107	40	t-Test: Two-Sa	mple Assur	ning Equal Variances
102	45			
81	66		A and B	C and D
91	68	Mean	96.9	58.6
82	68	Variance	464.1	162.9333
147	43	Observations Pooled	10	10
113	72	Variance Hypothesized Mean	313.5167	
80	74	Difference	0	
76	58	Df	18	
90	52	t Stat P(T<=t) one-	4.836748	
		tail t Critical one-	6.62E-05	
		tail P(T<=t) two-	1.734064	
		tail t Critical two-	0.000132	
		tail	2.100922	

The p value at 0.000132 is less than 0.05 indicating that the MSCE pass rate is statistically significant between district boarding facilities schools and boys boarding facilities schools.

The section below shows research findings on the schools' status in public university selection among girls in district boarding schools.

 Table 4.22

 Table 4. 22 Girls' Public University Selection Rate from District Boarding Schools

No. of students who passed the exam	School A	School B	Total
	512	457	969(100)
No. of students who were selected	49	58	107(11.04)
Selection %	(9.57)	(12.69)	(11.13)
No. of students who were not selected	463	399	860
Failure %	(90.42)	(86.87.)	(88.87)

A total of 969 girls who passed the Malawi School Certificate of Education examinations 107 representing 11.13 % were selected into public university while 862 representing 88.87 % were not selected for public university education.

Table 4.23

Table 4. 23 Students' Status on Public University Selection from 2010-2019 In Boys Boarding Facilities Schools

# of students who passed the exam	School C	School D	Total
	289	297	586(100)
No. of students who were selected	22	21	43(7.3)
Selection %	(7.61)	(7.07)	(7.3)
No. of students who were not selected	267	276	543
Failure %	(92.39)	(92.93.)	(92.86)

A total of 586 girls who passed the Malawi School Certificate of Education examinations 43 representing 7.14 % passed the examination while 543 representing 92.86 % were not selected for public university education.

Comparatively, more girls from district boarding schools were selected for public university education than girls in boys boarding facilities schools.

In order to check statistical significance of the public university selection gap between the two school models, a null hypothesis "there is no public university selection gap between girls selected in boys boarding facilities schools and the girls selected in district boarding schools" was tested as below.

Ho....hypothesis

Girls' public university selection rate in boys boarding facilities schools is not the same as girls' performance in district boarding schools.

Ha.....hypothesis

Girls' public university selection rate in boys boarding facilities schools is the same as girls in district boarding schools.

Table 4.24

T-Test of Public University Selection Rate

Table 4. 24 T-Test of Public University Selection Rate

A and B	C D	and			
5	3		t-Test: Two-Sa	mple Assun	ning Equal Variances
5	4				
5	3			A and B	C and D
8	2		Mean	10.7	4.3
8	2		Variance	37.78889	3.344444
12	4		Observations Pooled	10	10
15	7		Variance Hypothesized Mean	20.56667	
16	6		Difference	0	
9	6		Df	18	
24	6		t Stat P(T<=t) one-	3.155608	
			tail t Critical one-	0.002735	
			tail P(T<=t) two-	1.734064	
			tail t Critical two-	0.005471	
			tail	2.100922	

The p value at 0.005471 is less than 0.05 indicating that the public university selection rate is statistically significant between schools in the district boarding facilities

schools and boys boarding facilities schools. Question one indicates the academic gap between boys boarding facilities schools and district boarding facilities schools.

Research Question Two

Research question two seeks to discuss the factors contributing to low academic performance among girls in boys boarding facilities schools as below. According to a study done in Kenya, where teacher qualification had a substantial impact on determining school outcomes, the researcher examined several criteria, such as teachers' qualifications, in order to respond to research question two. Wallace (2011) also stated that highly qualified teachers are seen as change agents when it comes to enhancing both the standard of education and students' academic achievement.

 Table 4.25

 Table 4. 25 Teachers' Educational Qualification in District Boarding Schools

Qualification	Diploma	Degree	Masters
Teachers	2	9	1
Percentage	16.6 %	75 %	8.3 %

The data in the table shows that 2 (16.6 %) teachers were qualified for the teaching position with a diploma certificate, 9 (75 %) were qualified to a degree certificate and 1 (8.3 %) had a post degree certificate. The data show low level of impact of lack of qualified teachers on female students' academic performance and therefore, girls' academic performance cannot be negatively impacted. As per Malawi's standard the teachers were duly qualified to teach in the secondary schools (Beytekin & Chipala, 2015). With this

available data, it is expected that teacher's qualification cannot be attributed to poor academic performance among the girls.

Table 4.26

Table 4. 26 Teachers' Educational Qualification in Boys Boarding Facilities Schools

Qualification	Diploma	Degree	Masters
Teachers	3	9	0
Percentage	25 %	75 %	0

The quantitative date shows that 3 (25%) teachers were qualified to a diploma certificate and 9 (75 %) were degree certificate holders. The data re-affirm that that the teachers were adequately qualified for the task of teaching the learners in the school.

Teachers' educational qualifications

Ho....hypothesis

Teachers in boys boarding facilities schools do not hold the same educational qualification as teachers in district boarding schools.

Ha.....hypothesis

Teachers in boys boarding facilities schools hold the same educational qualifications as teachers in district boarding schools.

Table 4.27

Table 4. 27 T-Test on Educational Qualification

Boys
Boarding District
school boarding t-Test: Two-Sample Assuming Equal teachers school Variances

3	2			
				District
			Boys Boarding	boarding
9	9		school teachers	school
0	1	Mean	4	4
		Variance	21	19
		Observations	3	3
		Pooled		
		Variance	20	
		Hypothesized		
		Mean		
		Difference	0	
		Df	4	
		P(T<=t) one		
		tail	0.5	
		t Critical one		
		tail	2.131847	
		$P(T \le t)$ two-		
		tail	1	
		t Critical two-	0 ==0 4.45	
		<u>tail</u>	<u>2.776445</u>	

With a two tailed value of 2.776445 and a p value of 1.0 which is above p value of 0.05, the conclusion is that there is no statistical significant difference in teachers' academic qualification in the two school models

The second factor is the teaching experience of the teachers. The teaching experience of teachers is one of the crucial factors that promotes and improves student performance (Kini & Podolsky, 2016). This is complemented by Akala, Imonje and Wandera (2019) who stated that teaching experience is a global phenomenon that affects how students perform in school.

Teachers' years of teaching in the profession

Table 4.28

Table 4. 28 Years of Teaching Experience (District Boarding Schools)

Years	0-4 yr.	5-9 yr.	10-14 yr.	15-20 yr.	21yr +
Teachers	0	1	5	3	3
Percentage	0	8.3 %	41.66 %	25 %	25 %

Teachers' years of experience in the district boarding schools show that out the 12 teachers, 1 (8.3 %) the ranged in the 5-9 yrs., 5 (41.66 %) were ranged in the 10-14 yrs., 3 (25 %) were ranged in the 15-19yrs., and 3 (25 %) were ranged 20 years plus. The majority of the teacher participants in the district boarding schools were well experienced in the range of 10-14 years of teaching experience.

Table 4.29

Table 4. 29 Years of Teaching Experience (Boys Boarding Facilities Schools)

Years	0-4 yr.	5-9 yr.	10-14 yr.	15-20 yr.	21yr +
Teachers	0	1	5	2	4
Percentage	0	8.3	41.66	16.66	33.33

The quantitative data shows that out of the 12 teachers, 1 (8.33 %) ranged from 5-9 years of teaching, 5 (41.66 %) ranged from 10-14 years of teaching, 2 (16.66 %), and 4 (33.33 %) were 20 years and above. The majority of the teacher participants in the boarding facilities schools were well experienced in the range of 10-14 years of teaching experience. The findings suggest that the girls were consistently taught by the same teachers and that there was no interruptions in the teaching and learning processes.

Ho....hypothesis

Teachers in boys boarding facilities schools do not hold the same teaching experiences as teachers in district boarding schools.

Ha.....hypothesis

Teachers in boys boarding facilities schools hold the same teaching experience as teachers in district boarding schools.

Table 4.30

T- Test on Teachers' Years of Experience

Table 4. 30 T- Test on Teachers' Years of Experience

Boys Boarding school teachers	District boarding school			
0	0			District
0	1		Boys Boarding facilities school	
7	6	Mean	2.4	2.4
1	5	Variance	9.3	8.3
4	0	Observations	5	5
		Pooled		
		Variance	8.8	
		Hypothesized Mean		
		Difference	0	
		Df	8	
		t Stat	0	
		$P(T \le t)$ one-		
		tail	0.5	
		t Critical one-		
		tail	1.859548	
		P(T<=t) two-	4	
		tail	1	
		t Critical two-	2 206004	
		tail	<u>2.306004</u>	_

With a two tailed value of 2.306004 and a p value of 1.0 which is above p value of 0.05, the conclusion is that there is no statistical significant difference in teachers' teaching experience in the two school models.

Teachers' years of teaching in the current schools

Table 4.31

Table 4. 31 Years Taught At the Current Station (District Boarding Schools)

Years	0-4 yr.	5-9 yr.	10-14 yr.	15-20 yr.	21yr +	
Teachers	3	9	0	0	0	
Percentage	25 %	% 75 °	% 0	0	0	

Years of teaching at the district boarding school indicate that 3 (25 %) of the teachers had taught at the schools in the 0-4 yrs. ranges. The majority of the teachers had taught at the school in the 5-9 yrs. ranges. Therefore, they provided adequate information in relation to academic achievement in the MSCE and public university examinations and were also well versed with issues affecting academic achievement in district boarding school.

Table 4.32

Table 4. 32 Years Taught At Current School (Boys Boarding Facilities Schools)

Years	0-4 yr.	5-9 yr.	10-14 yr.	15-20 yr.	21yr +
Teachers	4	8	0	0	0
Percentage	33.33 %	66.66	5% 0	0	0

The quantitative data above shows that out of the 12 teachers 4 (33.33%) of the teachers were at the school in the range of 0-4 years and 8 (66.66 %) of the teachers were at the school in the range of 5-9 years. The majority of the teachers had taught at the school in the 5-9 years ranges which gives advantage to the learners to have been consistently taught by the same teachers. According to research by Onsomu (2014), frequent teacher movement affects the consistency and continuity of instruction in schools.

Ho....hypothesis

Teachers' number of years teaching at the current boys boarding facilities school is not the same as those in district boarding school

Ha....hypothesis

Teachers' number of years teaching at the current boys boarding facilities school is the same as those in district boarding school.

Table 4.33

T-Test on Number of Years at the Current School

Table 4. 33 T-Test on Number of Years at the Current School

t-Test: Two-Sample Assuming Equal Variances

Boys Boarding school teachers	District boarding school	_	Boys Boarding District school boarding teachers school	9
4	3	Mean	2.4	2.4
8	9	Variance	12.8	15.3
0	0	Observations Pooled	5	5
0	0	Variance Hypothesized Mean	14.05	
0	0	Difference	0	
		Df	8	
		t Stat P(T<=t) one-	0	
		tail t Critical one-	0.5	
		tail P(T<=t) two-	1.859548	
		tail t Critical two-	1	
		tail	2.306004	

With a two tailed value of 2.306004 and a p value of 1.0 which is above p value of 0.05, the conclusion is that there is no statistical significant difference in teachers' years at the current schools they were teaching during the time the study was undertaken in the two school models.

Militating factors

Assessment of Malawi's education educational plans revealed gaps on critical areas that need to strengthen quality secondary education among girls selected in boys boarding facilities school as presented in figure 4.3.

Figure 4.3

Figure 4. 3 Educational Plans

Education one of the tools for socio-economic development of the nation and the establishment of the formal education plans to run from 1964

First education plan

1973-1980

Policy development on primary, secondary, teacher education technical and vocational training.

Second education plan

1985- 1995

Consolidate policies on physical and human resources at all levels of the education system

Third education plan

1995-2005

Policy on access and equitable education

system at all levels

Fourth education plan

2008-2017

Policies on access and equity; quality and

relevance; and governance and management.

Fifth education

plan 2020-2030

Policies on access and equity; quality and relevance; and governance and management

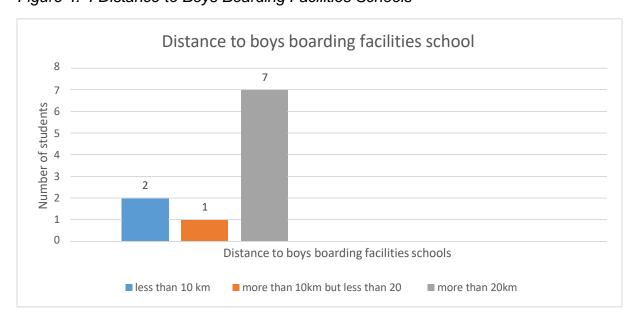
Table 4.34

Table 4. 34 Key Challenges and Expectations from the Educational Plans

Key challenge	Expectation
Lack of a standardized school	The quality, efficiency and
infrastructure policy to define the	effectiveness in boys boarding
minimum requirements and standards	facilities schools can improve by the
for a school in all education policies	standards in which the schools are
	constructed and established.
Lack of teaching and learning	The quality, efficiency and
materials policy to inform allocation of	effectiveness in boys boarding
resources.	facilities schools can improve by the
	evidence-informed policy on
	allocation of resources in the Ministry.
Lack of teacher allocation policy to	Regulating the number of years a
ensure that schools have	teacher can stay at one institution.

In figure 4.4 below, the researcher wanted to find out the distance of the girls from home background to the boys boarding facilities schools given the fact these girls were selected to attend boys boarding facilities schools as day scholars.

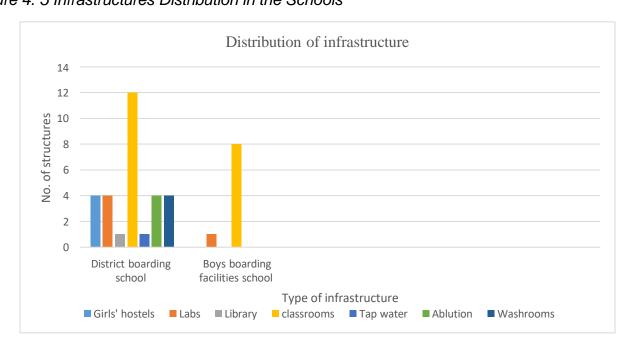
Figure 4. 4 Distance to Boys Boarding Facilities Schools



Only two (20%) of the ten female students in the two boys boarding schools who replied to the question about their homes' location said they lived less than 10 kilometers away. Seven students (70%) came from households more than 20 kilometers away, compared to one student (10%) who came from a home more than 10 kilometers away but less than 20 kilometers. The results indicate that more girls were chosen from outside the specified household regions. These are the females who reside in hostels built by the community and in rented houses near the schools. Typically, the hostels built by the communities do not conform to government standard and designs as a result they lack amenities like tap water, good beds and mattresses, and functional lavatories.

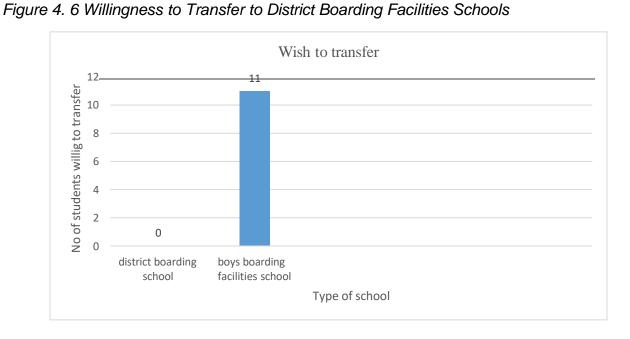
The selection of girls to boys boarding facilities schools as day scholars indicate the mismatch between policy and practice. Therefore the absence of girls boarding facilities in boys boarding facilities contributed to the girls' low academic performance.

Figure 4. 5 Infrastructures Distribution in the Schools



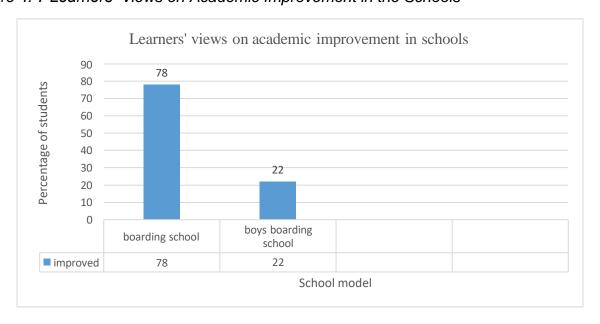
As seen in figure above, district boarding schools have adequate laboratories, library, tap water, ablution, and washrooms for the use of the girls in addition to having girls' hostels, whereas boys boarding facilities schools do not have any girls' hostels and have subpar laboratories, tap water, ablution, and washrooms. Ministry of Education (2020) re-affirmed that up to date it does not have a set standard for school infrastructure that outlines the minimal needs and standards for a secondary school. Furthermore, some of the structure in boys boarding facilities schools are subpar and do not even meet the various needs of the boys themselves. Due to this, the girls claim that the boys boarding facilities schools do not run effectively and efficiently, which has a negative impact on girls' academic performance.

Figure 4.6



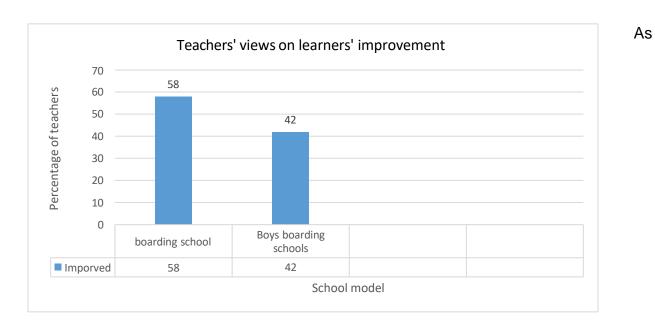
As seen from the figure above, eleven students from boys boarding facilities schools preferred to move from the boys boarding facilities schools to either a national secondary school or a district boarding school, but no student from a district boarding school wanted to leave their school. According to the statistics, the majority of female students in boys boarding facilities schools choose boarding schools since travelling from their homes reduces the amount of time they spend interacting with their peers and teachers, which ultimately affects their academic status. These findings support the notion that female students accepted into institutions with males' residential facilities are less inclined to stay there. This confirms the fears that students in Kenya have with Day Secondary Schools on the performance at the national examinations (Ngetich, 2020).

Figure 4.7 Learners' Views on Academic Improvement in the Schools



As presented in figure above, 78% of the students in district boarding facilities schools responded that their academic performance improved upon joining the school. While, 22% of the students in boys boarding facilities schools responded that their educational performance did not improve. From this, one can understand that academic performance is more effective in district boarding facilities schools than in boys boarding facilities schools. According to Joshua and Zacharia (2016) boarding schools are more efficient than day schools in improving learners' academic performance.

Figure 4.8Figure 4. 8 Teachers' Views on Learners' Improvement in the Schools



presented in figure 5 above, 58% of the teachers in district boarding facilities schools responded that there was academic performance improvement among the girls upon joining the school. While, 42% of the teachers in boys boarding facilities schools responded that there was no educational performance improvement upon the girls joining the school. From this, one can understand that there were was a higher percentage among teachers in district boarding facilities schools that indicated girls academic improvement. The results support those of Adetunde and Asare (2009), who found that boarding students and day students exhibit distinct academic performance differences due to unequal and incomparable learning environments. According to Chika and Ogechukwu (2018), day students are more likely to be distracted at home than boarding school students who are under the supervision of teachers for their academic performance.

Figure 4.9

Figure 4. 9 Diagrammatic Presentation of Participants' Responses

TEACHERS, STUDENTS AND POLICY MAKERS

Poor learning environment

TEACHERS AND STUDENTS

1. Peer pressure 2. Low self-esteem 3. Lack of motivation 4. Lack of girls' boarding facilities

TEACHERS

1. Under deserving students, 2. Laziness 3. Boy/Girl relationships 4. Lack of girls' boarding facilities

STUDENTS

1. Underrated 2. Poor selection process 3. Poor school record 4. Lack of girls' boarding facilities

Thus, the results of the data obtained from students, teachers including head teachers and policy makers vary from type of respondents regarding the levels of militating factors. This suggests that there are numerous causes for subpar academic achievement from numerous angles.

Students

The girls in boys boarding facilities schools feel that they are underrated not only by their teachers but also by the society because of how Ministry of Education categorized

secondary schools in Malawi. In addition, the students recalled that selection criterion favours the top scores for the best schools and those students selected as day scholars imply that they scored low marks during their primary school final examinations. For instance, learners in districts with one or more district boarding schools are stratified by gender and then selected into the district boarding schools based on merit. This implies that learners with low scores are left out to be selected in the next low level secondary school category. It is against this point that even some teachers described the girls in boys boarding facilities as not deserving.

Teachers

Teachers described girls in boys boarding facilities schools as not deserving and lazy. However, it was difficult to ascertain the factors mentioned by the teachers on one hand and on the other hand this confirmed the sentiments by the students that teachers underrate them. Even though the teachers had expressed that some girls fail to concentrate in their studies due to boy girl relationships, this factor was not mentioned anywhere by the students themselves. This would imply that, either the students were covering up their sins or the teachers were generalizing the point given the fact that the girls were day scholars and that they hardly spend all their time in school. In order to effectively assess student characteristics, learning needs, and task requirements for their pupils, teachers needed a wide variety of judgment competences (Urhahne & Wijnia, 2021).

Teachers and students

These two groups of participants expressed that peer pressure, low self-esteem and low motivation were responsible for the girls' poor academic performance in boys

boarding facilities schools. The infrastructure in the boys boarding facilities schools is inferior compared to infrastructure in district boarding school and this is a demotivating factor leading to low self-esteem among the girls. According to Ambasz, Barrett, Treves, Shmis, and Ustinova (2019), unfair distribution of educational resources breeds resentment and dissatisfaction, which leads to high failure rates as well as incidents of students and teacher absenteeism. There is a strong case to be made that providing schools with proper facilities might significantly improve equity, boost enrolment, encourage student retention, and increase pass rates.

Students, teachers and policy makers

Although the policy makers argued that it might be impossible for school planners to create a school system and environment that will best facilitate the educational process, the students, teachers and policy makers agreed that generally, the learning environments in the two school models were not the same. The learning environment is boys boarding facilities schools was poorer than in district boarding facilities schools in terms of structure and design. From the perspective of facilities, it is being argued that it is always essential to have some common quantitative denominators or parameters that will enable school planners to detect any anomalies in the existing school models or systems and designers to develop solutions that meet both current and long-term needs.

Research Question Three

Research question three wanted to find out the roles and responsibilities of the Ministry of Education in the promotion of girls' academic performance in boys boarding facilities schools.

Findings show that Ministry of Education fairly distributes teachers according to gender, qualifications and areas of subject specialization.

Table 4.35

Table 4. 35 Teachers' Gender

Gender	Male	Female
Teachers	16	8
Percentage	66.66 %	33.33 %

Out of the 24 teacher participants, 16 (66.66 %) were males and 8 (33.33 %) were females. The gender numbers still point to the fact that there are less female teacher representation in the sampled secondary schools. This is also another area where the Ministry of Education and entire government machinery start addressing so that secondary schools have more role models to improve their academic performance.

 Table 4.36

 Table 4. 36 Teacher Specialization per School Category

Area of specialization		Language	Sciences
Humanities			
Boys boarding facilities school	2	3	7
District boarding school	3	5	4
Percentage	20.8	33.3	45.8

In this study, teaching specialization refers to a teacher being an expert in the respective field. So in secondary school, there are three major areas of specialization as indicated above. The quantitative data shows that 5 (20 %) of the teachers belong to

languages department, 8 (33.3 %) belong to sciences department and 11 (45.8 %) belong to humanities department.

The qualitative data that was gathered from the open-ended interviews with policy makers show that there are no special provisions made to girls in boys boarding facilities schools in relation to girls boarding facilities which also encamps all sanitary provisions. The policy makers alluded to the fact that a good school environment for the girls need to have good sanitary facilities like clean toilets, washing facilities and shower rooms. "In this regard, in order to address this issue, policy maker [A] affirmed, "It is vital to offer enough of these amenities and maintain their cleanliness"

The policy maker [A] went further to observe that, "Because girls are most vulnerable, they are more likely to be absent, from school when there is absence of clean facilities to aid to learning processes in schools."

Policy maker [B] hinted that in principle, boys boarding facilities schools were meant to offer secondary school education to the less privileged girls who learn in primary schools that are within the 7 km radius to the boys boarding facilities schools at a low cost by making the girls day scholars. Therefore, the lack of girls boarding facilities in boys boarding facilities schools does not arise from the policy point of view."

The policy maker [B] further mentioned that "until now, the Ministry of Education does not have a teaching and learning materials (TLM) policy for guiding the availability of learning resources in the schools and there is also no clear budgets for the same." Further sentiment indicate that there is also inadequate infrastructure for the girls to use and extended to report that the condition is worse in most CDSS' as they do not have the science laboratories to offer more science subjects to the leaners.

The state of affairs in boys boarding schools seem to point to the fact that resources gaps are there in almost all Malawian Schools. In this regard one learner lamented that "There are no resources available. We do have a little contribution of money which is called parents' teachers funds by every student but we are told it is not enough to provide any kind of meaningful or any special services for girls."

The challenge of girls' infrastructural provision also extended to learning support facilities such as laboratories and girls' hostels. Girl children themselves acknowledge that their poor academic is because of the lack of these facilities. They argued that "there are some subjects like Home Economics and Cookery that were not offered at boys boarding facilities due to lack of Home Economics Laboratory".

Along these lines, are the responses from the teachers' believe that, government does not clearly come out how on the type of support that is needed for the girls in boys boarding schools. In their opinion, the government needs to invest more in building school structures such as girls boarding facilities in boys boarding facilities schools in support of the girls in their quest for quality secondary school education.

Mitigating factor

Previous studies have reported challenges in the secondary education sector which include inadequate funding, overcrowding, inadequate and unqualified teaching staff, poor school infrastructure, and poor quality grades (Mgomezulu & Wamba, 2014). The results of this study provide new insight on how the Ministry of Education can address challenges affecting girls in boys boarding facilities schools. Firstly, the Ministry of Education up to date does not have a teaching-learning material policy and this must have a significant negative effect on female participation in the studied school models.

Secondly, the Ministry up to date does not have a standardized school infrastructure package that defines the minimum requirements and standards for a school means that schools are constructed without adequate and necessary structures. This has resulted in some of the structures being substandard and do not take care of the diverse needs of learners. According to the study's findings, the establishment and construction of secondary schools impact the efficiency and efficacy of a secondary school model.

Evaluation of the Findings

This study is based on the discovery that Malawi has a severe shortage of space in public secondary schools, which prevents many capable students from making the transition from primary to secondary education. For instance, just 38% of pupils who passed the required exams were accepted into public secondary schools in 2020. The road ends here eventually for students from underprivileged families. More secondary schools should be created, both in urban and rural locations, for eligible but underprivileged students who cannot afford private education. Additionally, the new investment policy was implemented in order to increase girls' access to secondary school education. This study was designed to assess and compare girls' secondary school education between boys boarding facilities and district boarding schools. The focus of the study was to assess the learning achievement of form four students. For this study four secondary schools in the Central West Education Division. Two district boarding schools and two boys boarding facilities schools were purposefully chosen for the study. The total sample of this study consisted of 102 participants, consisting of 4 head teachers, 24 teachers, 72 female students and two policy makers. The study tried to calculate the average success rates for the Malawi School Certificate of Education examination from

2010 to 2019 from both district boarding schools and boys boarding facility schools. The study also analyzed the number of girls chosen to attend public universities within the same time period.

A university education may require a significant investment of time and money to obtain the skills and information required by an employment, but it is also valuable for leading a fulfilling life. We all need a precious asset in life, which is a university education. A degree opens up many life opportunities that are necessary for becoming productive, achieving personal ambitions and financial goals, and expanding your intellectual curiosity. Due to their extensive education, university graduates have a number of advantages.

People who are interested in attending colleges find the experience more rewarding and enjoyable because the education equips them with the skills necessary to live better lives and contribute to society. The employment chances that come with a university education are guaranteed, and it also provides many advantages including maintaining good team cooperation, networking, and being open-minded. Universities instruct students on a variety of advancements, helping them to broaden their perspectives and comprehend the universe. A student that is open-minded has more global knowledge and job options.

The major purposes of university education are to help students reach their financial objectives and to equip them with the information and skills that employers demand. A university graduate who is proficient in English has a good possibility of traversing the world to teach others the knowledge and abilities needed to thrive in life. Through education, a degree holder can aid in the growth of others. The only

disadvantage of a university degree is that it is not beneficial for someone who wants to change their level of living or become financially independent because they will need to impart their information to others they deal with.

People with financial independence have the opportunity to explore the world, volunteer, and make charitable contributions to those in need. Because of their high fees and additional costs like travel, food, lodging, and tuition, universities may be costly. In order to meet its demands, the labor market needs workers who are properly prepared. People who need to earn more money should relocate to finish their university degrees. Focus and effort are essential for achieving the goals we need in life. Due to the poor public university selection percentages in both school models, governments are being urged to include vocational programs. In Africa, secondary school education has undergone reforms that increased the number of schools and students as well as a review of the curriculum that changed the subject's composition by introducing vocational topics. Others refer to the process of reviewing and repackaging the secondary school curriculum into a vocational model that is competency and skill-specific as the vocationalization of secondary school (Pavlova & Maclean, 2013). Some people define the vocationalization of secondary school as the addition of more vocational subjects to secondary school education (Oketch, 2014).

According to the literature, the advent of developing technologies like computer technology, basic electronics, and ideas like business studies led to a growth in vocational topics. The secondary education curriculum has undergone various revisions, including repackaging the content to align with the teaching and learning models; countries like Kenya and Uganda, among others, adopted competency-based curricula to improve the

delivery of the content for vocational subjects, while countries like Mauritius are separating academic and vocational curricula. Nevertheless, in other nations there is no obvious separation between the curriculum content that is categorized as academic and vocational, respectively. To divide or combine academic and vocational curriculum content, or to vocationalize the entire secondary education curriculum, leadership decisions must be made, taking into account several factors.

The study's key findings are summarized here and demonstrate how important the school environment was to the academic success of the girls enrolled in district boarding schools. According to Glewwe, Brooke, and Krause (2016), the common denominator in school improvement and student success is the "school infrastructure." The participants discussed the underlying themes in their educational setting that they felt contributed to the academic, policy, and resource disparities.

Using both qualitative and quantitative methods, Mokaya (2013) discovered that better academic performance is linked to more adequate and well-spaced classrooms, adequate and ample library spacing, adequate science labs, adequate water and sanitation facilities, and adequate participation in extracurricular activities. These findings are in line with the findings of the current study, which indicate that girls in district boarding schools for performed better than the girls in boys boarding facilities schools. The term "district boarding schools" refers to institutions that keep students on-campus in boarding facilities. According to the learners' comments, they are free to study intensely while on campus. They even study at night under the supervision of their teachers. In addition, district boarding schools have adequate science laboratories for both practical and theoretical subjects. The schools have good sanitation facilities and other social amenities

which makes the learning environment conducive. District boarding schools are also at advantage to offer science subjects which include home economics, cookery and needlecraft.

The analysis in the study included school facilities as meaning, we need to signify housing, classrooms, laboratories, dormitories, administration block, facilities, play fields and all other related facilities operated in connection with a school. School infrastructure is a major factor in ensuring that girls obtain quality education. This justifies why most researchers have often used one of the criteria for measuring academic performance. Some Recent studies conducted in the United Kingdom have shown the impact of infrastructure on learners' educational outcomes and explain 16% of the variation in primary school students' academic achievement. Malawi school certificate of education examination pass rate among girls in boys boarding facilities schools does not come as a surprise. For instance, the lack of girls boarding facilities, the use of pit toilets, the solitary laboratory, the absence of a school library, and other damaged school structures are examples of the poor infrastructure in these boys boarding facilities schools. Poor infrastructure not only compromises girls' academic achievement but also their right to education, safety, and health. Due to the less motivated and disinterested students they teach, teachers in boys boarding facilities schools may also be impacted to a greater extent.

The responses from policymakers indicated that one of the factors responsible for academic achievement gaps emanates from the unavailability of adequate capital investments opportunities. For instance, when the government implemented Structural Adjustment Programs, the construction of secondary schools did not include boarding

facilities. The reason was that with limited internal and borrowed resources, it was not feasible to operate boarding schools. Instead, the government attempted to bring day schools closer to learners and facilitated the improvement of existing structures in secondary schools. By having a large portion of funds going to the payment of teachers and staff, the government has not been able to build new schools with boarding facilities attached. Due to inadequate finance, boarding schools were no longer supported by the government by the year 2000, which contributed to the bad infrastructure in boys boarding facilities schools. It has been stated that building boarding houses and other school-related infrastructure requires significant funding and likely has a lengthy payback period. Such projects often require substantial land use and at least modest high technology utilization. Additionally, it takes a while for the planning and implementation process to achieve a certain economic size (Drestalita, Maryati, & Novitasari, 2017). Considering the role played by infrastructure, it is unlikely that Malawi will experience improved productivity and reduced poverty by the year 2030 or 2063.

Because of the high rates of poverty and illiteracy in Malawi and around the world, governments and other organizations should view public education as a worthwhile investment due to its significant social and economic advantages. According to research, those who complete high school and have access to quality instruction throughout their elementary and secondary education are more likely to find gainful work, establish stable families, and participate actively in their communities. Additionally, they are less likely to commit significant crimes, to lay heavy demands on the public healthcare system, and to sign up for waiting lists for government and organization handouts. As a result, government spending on public education, particularly for girls at boys boarding schools,

can be much more cost-effective than dealing with the social and economic effects of underfunded, subpar institutions. According to the human capital hypothesis (Blundell et al., 1999), education investment is required to gain skills and training, which in turn will grow individual capital. These abilities will boost his or her efficiency at work (Tan (2014). Nations are signaling that human capital is built up by investing in education so that people can compete in the new society and reduce poverty, and this vision of the knowledge economy is becoming more global (World Bank, 2018). The human capital theory is one theory mostly used in educational policies to inform policy and practice. Previous literature proved that secondary education was a critical instrument in building the national economy much faster than universal primary school education alone (Grant, 2017) by making a meaningful investment in girls' education. Essentially, secondary school education provides workforce skills that are required in the production of goods and services. In addition, secondary school education promotes learners for further studies in Universities and Colleges

Given the fact that one of the missing elements in improving access to quality secondary education in Malawi is teacher supply amidst the persistent loss of skilled and experienced secondary school teachers. Even though Teachers' Union of Malawi (2007) contended that the supply of teachers has failed to keep pace with demand in most Malawian schools, the findings in this study so far indicated that there wasn't teacher shortages.

Further research revealed that the academic achievement of the students was unaffected by the teachers' years of experience, academic background, or time spent teaching at the current schools. It should be surprising that girls in boys boarding facilities

schools did not score higher than girls in boarding schools with highly skilled and experienced teachers. This shows that the Ministry of Education is appropriately carrying out its duty to assign qualified teachers to the two school models. This confirms that lack of teaching and learning is one of the reasons that prevents teachers from effectively delivering the curriculum (Kadzamira, 2001). The female participants in this study who attended boys-only boarding schools blamed the absence of girls boarding facilities for their failure.

The decision-makers agreed with the female students that the infrastructure at boys boarding facilities schools needed to be upgraded, stressing the need for local governments to work with communities to promote secondary school education through the establishment of Parents Teachers Associations. Literature has demonstrated that community involvement in schools in the form of funding, inspiring teachers, and maintaining secondary school infrastructures affects students' academic achievement. This study found that the boys boarding facilities schools have long stayed in an unimproved state because parents' financial contributions do not always match the anticipated aims. For instance, the response contended that the funds raised would not be sufficient to create girl boarding facilities and that extra funding was consequently needed for infrastructure development at the schools. The Parents Teachers Associations are not involved in school management, which limits their effect on other school-related issues. This is another barrier to community involvement in schools. The term of membership also hinders the Parents Teachers' Association's efficiency. It can be difficult to maintain the functions and activities of the association because the membership is made up of parents whose children and wards are currently enrolled in school. It is argued

that some parents end their term of membership while still influential. Therefore, the term of membership limits parents' influence in the school activities. The female participants opposed the idea of parents contributing PTA contributions on the grounds that their parents are already responsible for paying their tuition and that these extra funds would only add to their burden.

While it is commendable that the government implemented a policy mandating community involvement in school financial management, there has been no further guidance on how the monies should be spent. Due to the fact that each school established its own goals, different schools have not benefited significantly from this. For instance, several schools in Kenya have built new buildings, science labs, repaired damaged materials, and constructed new school grounds using PTA donations (Husein, Muturi & Samantar, 2018).

In this regard, the study's findings showed that even though communities participate in supporting their children's education by giving PTA funds, the general perception is that they have little impact on enhancing school facilities due to a lack of additional policy directions.

Literature demonstrates that girls frequently face discrimination in the classroom and lack of role models among female teachers (Rihani, 2015). Performance of girls in schools is greatly affected by the teaching work force in regards to quality, ability to relate and availability of psychosial counsellors and role models to inspire the girls. Secondary schools should employ female teachers who may act as role models. It has frequently been stated that female teachers are much less likely to sexually harass or otherwise degrade their female students. They are also much less likely to harbor gender biases

towards females. In some traditional rural and urban areas, parents could also feel uneasy about sending their child to a male teacher. It is a squandered opportunity when there aren't enough female teachers in a school to consistently provide youth meaningful. and professional female role models. Two female teachers who hold diploma certificates and six female teachers who hold degree certifications shows that there are enough female teachers serving as role models in the two school models. The study demonstrates that the females in boys boarding facilities schools had role models, despite the fact that there were only 8 (33.3%) female teachers compared to 16 (66.6%) male teachers. The presence of one or more female teachers may offer security for girls from unwanted attention from boys or male teachers, as well as from sexual abuse and exploitation. This is in addition to serving as role models (Quimby & DeSantis, 2006). Although the results of this study indicate that female teachers may act as advocates for girls at the school policy level, representing their perspectives and needs and encouraging more girl-friendly learning, the female teachers may also be able to advocate for better lavatory and laundry facilities at the national level.

According to the study's findings, practically every girl enrolled in boys boarding facilities school expressed interest in transferring to a district boarding school. While the girls believed that this would help them achieve better scores, research has shown that pupils who experience school transfers suffer negatively in their academic performance. Due to uncertainty that may have resulted from the fact that students who transfer schools experience a variety of educational outcomes, it is still unclear how student transfer affects high school students' chances of graduating and enrolling in postsecondary institutions (Herbers, Reynolds, & Chen, 2013). Additionally, it can be challenging for

school administrators to place students in the appropriate classrooms and with special education programs when they arrive at their new schools with incomplete records.

The study's conclusions show that society and educators seem to think that girls who are selected to boys boarding facilities schools are losers while girls who are selected in district boarding schools are winners. The conclusion is based on the findings that the girls in boys boarding facilities schools described their academic progress as slow and a threat to their future aspirations because of failure to pass the Malawi School Certificate of Education examinations, a failure to get either formal employment or informal employment, and failure to pursue post-secondary education. Most female respondents from boys boarding facilities schools agreed that they hardly experienced academic improvement because they anticipated finding an improved learning environment but on the contrary, they found out that the learning environment was not all that improved.

Most of the respondents reported that their academic performance had not improved as most of them were struggling to keep pace with boys boarding facilities secondary school environment. The respondents reported that by commuting from home, they divided their attention even though they tried to put much This is now more influenced by one's position in a complicated social system than by personal achievement; because there have been instances when girls in boys boarding facilities schools have performed better than those in district boarding school. Thus, it is abundantly evident that obtaining a high-quality education is a requirement for anybody who wants to compete in the socioeconomic realm. However, girls who attend district boarding schools are more likely to receive a decent education than girls in attending boys boarding facilities schools. In support of this Hughs (1993) asserts that "disadvantaged students receive a basic

education that is shockingly inferior to white ones" (p. 61). At this time, all educators need to be reminded of their duty to turn their schools and classrooms into fair environments where they make an effort to teach each and every student. Moreover, the selection policy stand in the way of those in non-boarding facilities schools. As a consequence of this systemic view, girls in boys boarding facilities schools and in other non-boarding schools are resented as unsuccessful in some sense. This, explains why the girls in boys boarding facilities schools resented their schools which are perceived to be lacking the educational benefits that are required for their future life. This supports the girls' opinions that they should transfer to boarding schools.

It is suggested that one contender is respondents' animosity against boys boarding facilities institutions. It can also be argued that if we shift our attention away from the girls and their schools, we may better use resentment for good. However, this does not imply that we abandon participant-reactive attitudes at home. Instead, we are urged to put our attention on the procedures that will get rid of the defensive attitudes that female students in schools with boys boarding facilities have. According to the literature, participant reactive reasoning should be encouraged rather than participant reactive attitudes. According to Tollefens (2003), both school models' educational outcomes can be justified by participant reaction sentiments, such as resentment and thankfulness. One is inclined to essentially define reactive attitudes as "natural human reactions to the good or ill will or indifference of others towards us, as displayed in their attitudes and actions. Tollefens (2003) citing Strawson (1962) argues that the participant reactive attitudes like resentment and gratitude provide the justification for specific expressive kind of interaction among the girls in the two school models. It was not difficult to see the pattern

of response which characterized the negative reactive attitudes from the girls that were selected in boys boarding facilities school. They put the responsibility for their failure on the educational environment rather than considering how they would maximize learning in the absence of the females' residential facilities, science laboratories, libraries, and failure to study various science topics. They admitted, however, that their teachers had the training and experience necessary to impart the necessary information and abilities. This brings up the risks associated with the deficit thinking approach. According to the literature, deficit thinking ignores underlying causes of social and educational outcomes inequities, which is exactly what female students said about their subpar academic performance. On the other hand, some scholars contend that deficit thinking feeds the myth that a student's environment determines their success. Similar to this, deficit thinking claims that educating people is the way to reduce inequality and help them escape poverty. This supports the human capital theory's viewpoints as well. Deficit thinking, according to Aikman et al. (2016), may be disregarding the part that educational systems play in maintaining social injustices. Anti-deficit study aims to comprehend how successful people from particular backgrounds overcome such difficulties. The selection policy and secondary school differentiation may not be the reason for subpar academic accomplishment in that regard since it is considered that both policy makers and the administration believe that all students can study in those school environments under the allocated teachers. Everyone involved in education aspires to have high standards, but few actively work to help students meet those standards. It is claimed that setting high standards for pupils alone is insufficient. The learners must be able to meet and understand these criteria and objectives. Therefore, it is the duty of policymakers and

educators to help students understand the connection between high expectations and success.

The findings in this study support the results of Baafi (2020), who investigated the effect of the physical school environment on the academic achievement of Senior High School learners in Ghana. The results ably provided evidence to confirm that learners in Senior High School with a pleasant physical environment performed better than learners in schools with an unpleasant physical environment. It is important to correctly describe the physical environment as comprising buildings, classroom furniture, equipment, instructional materials, laboratories, and libraries. It was concluded that a good school environment should allow learners to increase their feelings of satisfaction, sense of belonging, identification, and achievement not only for the present but also for the future.

The above revelation meant that there has been a lack of inclusive approach to the less able learners. The circumstances in boys boarding facilities secondary schools highlighted some of the issues related to nature versus nurture. The assumption was that girls in boys boarding facilities secondary schools would have been provided with every opportunity to demonstrate their abilities through the implementation of a deliberate policy on school resource provision. It is therefore argued that failure to provide learning opportunities for a diverse range of abilities to shine is a recipe for poor MSCE and low public University selection among girls in boys boarding facilities secondary schools. Educationists agree that essentially, learners bring with them into school, experiences that eventually, influence their skills, knowledge, and understanding of the world. The fear that most parents and learners have about the new investment policy is that the policy seems to direct less attention to the development of the less able learners that are

selected in these schools. Consequently, it might be suggested that some learners are deemed more important and valuable than others depending on the type of investments made in the schools that learners attend. The other fear was that student selection procedures have not been uniform due to differences in available spaces in different districts, this was seen as denying access even to high achievers in districts deemed highly competitive at PSLCE.

The analysis of the findings in this study is guided by human capital as a factor in the education of females for its significant influence on how a society develops. The mandatory components of education, which ultimately include both boys' and girls' boarding facilities schools, lay the groundwork for the development of innovative thinking in the post-independence age. The human capital model highlights variations in investment and skill development as a result of unequal resources in secondary schools with boys boarding facilities schools. This is a study that was undertaken in leaners in two opposing learning environments. The motive of understudying learners in the two learning environment was supported with the fact that the learners are subjected to a single national examinations; implying that not all learning parameter were

It is important to understand that the innovative thinking of learners influences how actively motivated they are to learn and how they manage their own limited resources to meet their academic objectives. In addition, the innovative education model calls for adjustments to the educational atmosphere in the schools for girls who attend boys boarding facilities schools in terms of socioeconomic, cultural, and political factors. Girls who attend boys boarding schools facilities schools face a lot of strain, but innovative thinking from all stakeholders in the education system can help the girls to

overcome the problems. Therefore, the purpose of this study was to find out girls' academic achievement in boys boarding facilities schools. The study found that 67.38 % of the girls in district boarding schools passed the Malawi school Certificate of Education examinations against 60.4 % pass rate among girls in boys boarding facilities schools.

The study further revealed that 10.3 % of the girls who passed the Malawi school Certificate Education examinations in district boarding school were selected to pursue public university selection against 7.3 % of the girls in boys boarding facilities schools as shown in the table above. A learner must have earned a Malawi School Certificate of Education with at least six credit passes, including English Language, in order to be selected for a public university. According to the National Council for Higher Education, public universities only accept 35% of eligible candidates, leaving 65% of them out in the cold. In addition, there are students who complete the MSCE requirements with fewer than six credits who do not qualify for public university. This implies that access to public university in Malawi is still problematic. This suggests that additional efforts are required to encourage more girls not only in boys boarding facilities but also in district boarding schools to enroll in public universities and other higher education institutions. These results are consistent with Ngeno, Simatwa and Sol (2013) who found out that girls in boarding secondary schools performed better in Kenya Certificate of Secondary Education Examinations than girls in secondary school education as day scholars.

One is inclined to dismiss the variations as routine and inevitable when comparing the pass rates on the Malawi School Certificate of Education examinations and the rates of admission to public universities between the two school types. In order for the researcher and readers to understand that the study's findings are not only true but also

trustworthy because they are not the result of chance, statistical significance was determined. Therefore the available statistical data in this research unlike most of the self-reported data give us important indicators of likely trends that can be explored further

The results also showed that there were no statistically significant differences between teachers in district boarding facilities schools and teachers in boys boarding facilities schools in terms of their academic backgrounds, number of years spent teaching, and number of years spent at their current schools. This suggest that the teachers' personalities might not be the causes of the poor academic performance of girls attending schools with boys boarding facilities in this case.

Contrary to the above findings, Blazar (2016) had shown that teaching experience and educational qualification had influence on academic performance of students. In addition, literature, shows that it takes between four and seven years of experience for an individual to develop into a competent teacher (Carter & Doyle, 1995; Gonzalez & Carter, 1996; Varrella, 2000). Even though policymakers argued that secondary schools managed by the Ministry of Education have access to both qualified and experienced teachers, till to date there is no policy on teacher allocation which has resulted in some schools having teachers that have over stayed.

The findings show that 16.6% belong to language, 25% belong to science and 58 % belong to humanities departments in the boys boarding facilities schools. Whereas in district boarding schools, 25 % belong to language, 41.6 % belong to science and 33.3 % belong to humanities department. The use of crude teacher characteristics, in this in case the school-level teacher variables in only showing the departments in which the teachers belong was suitable way to check students' overall outcome without necessarily

considering subject-specific details. However, the use of subject-specific students' outcome needed the researcher to segregate the teachers into their respective subject-specific areas which would also be problematic to the other statistical figures. These results only support the students' claims that there were enough teachers in each academic discipline at the schools. As a result, the research study did not encounter any problems with insufficient teachers.

The most intriguing justification given by head teachers for the admission of girls as day scholars in boys boarding facilities schools is most remarkable. The head teacher [C] claimed that when girls were moved from boys boarding facilities schools to boarding schools, the boys' behavior deteriorated and got out of control. In order to manage the boys' behavior, the Ministry of Education decided to reintroduce the girls into the boys boarding facilities secondary schools. This has been the study's most astounding revelation to date.

The head teacher's report supports the claims made by Baumann and Krskova (2016), who claimed that when teachers create a disciplined environment where students respect them and they do not waste class time to learn, students perform at their best. Good discipline increases student productivity, which subsequently boosts academic success. However, this could be another area for further studies.

This study underlines the importance of future research on using longitudinal approach to find out how the examination results translate to future success among students. One of the reasons that educational inequalities attract substantial policy attention is the impact that education can have on later life outcomes. The large part of the human capital theory shows that higher levels of education are not only strongly

associated with better outcomes in employment and earnings, but also in outcomes such as health, happiness, marriage, crime, and civic participation (Tan, 2014). This means that the level of education that a person attains can dramatically shape their life chances across a range of areas that can make Malawi flourish. As discussed above, national examination results are the most commonly used education indicators. This means that higher examination grades should have greater success impact in future life of the students. The current research and typology of national examination results can be used in the future planning of effective national education plans. For example, it can be assumed that "minimum standards for infrastructure and the teaching and learning resources policies" have enormous potential to facilitate better and coordinated teaching and learning processes in the highly complicated and differentiated secondary school systems in Malawi and provide specific agenda settings for equal and comparable educational landscape. The study also identified additional advantages of using communities and other stakeholders for resource mobilization, for instance students in Christian mission secondary schools achieve best grades seconded by students in government boarding secondary schools. Students that attend secondary school education as day scholars perform the least. It means that differentiated school systems which is been practiced in Malawi is not suitable for efficient educational outcomes for the students and especially for the girl child who is selected in boys boarding facilities schools as day scholar.

Summary

According to both qualitative and quantitative data, the implementing the new investment policy has not been successful and cannot be used for the same circumstances in the future. For instance, 67 % of the girls in district boarding schools performed better than 60 % of the girls in boys boarding facilities schools. Further results show that 10 % of the girls who passed examinations were selected to public university against 7 % of the girls in boys boarding facilities schools. The quantitative results show a significant academic difference between the girls in the two secondary school categories. The qualitative data show that most participants including policy makers agreed that the Malawian secondary school system is highly differentiated and successful implementation of the policy requires fundamental reforms in the whole education plan. It means that the results identified policy gaps in the previous and current education plans in providing the strategies that should have communicated the anticipated reforms. At the same time, the situation is not so favorable with implementing the education model twoway symmetrical communications. According to the results, learner participants did not feel that the government has equal and comparable education policy plans for all learners in the Malawian secondary school system.

This study's findings suggest that the Government of Malawi, through the Ministry of Education, is unable to design several secondary school systems that would enable diverse users in the various specially built secondary school systems to achieve similar and equal educational results. The report calls on the Government of Malawi to establish secondary school infrastructure designs that describe the unembellished minimum

requirements and standards in order to give Malawian youth equal and similar educational opportunities.

CHAPTER 5: IMPLICATIONS, RECOMMENDATIONS AND CONCLUSIONS

Chapter five is about discussion of the implications, recommendations and conclusion on the aim of the study which is to determine on need for girls boarding facilities in boys boarding facilities schools. Most participants except for the policy makers stated that they did not find the boys boarding facilities school innovative enough for the girls' academic buoyance.

The study methodologies were directed by the questions listed below. Therefore, the study sought to answer the following questions;

- 1. Are there any differences in the academic achievement of girls in boys boarding facilities secondary schools and girls in other boarding facilities secondary schools?
- 2. What are the factors contributing to these differences?
- 3. To what extent does the Ministry of Education support girls that are selected for boys boarding secondary schools in the context of the new investment policy?

This mixed-methods research study's goal was to ascertain whether secondary schools with only boy boarding facilities required girls boarding facilities. The best strategy to tackle this research question, according to a thorough evaluation of the literature, would be to undertake an action research using both quantitative and qualitative data collection methods because Yin (2003) claims that there is no single source is superior to the other methods. The most usual methods for gathering data in a mixed-methods study like this one are surveys, interviews, focus groups, and archival documents, according to Johnson and Gill (2010). A deeper comprehension of the research was facilitated by the adoption of a mixed method design using an action approach which allowed active participation and involvement of education actors in changing situations and enhancing quality of

strategic plans and policies. Additionally, the use of an action research case study was also selected since it was a method that required participants to deliberately and meticulously analyze their own educational experiences and practices. As a result, the study obtained accurate information to address the three research issues.

Targeted population was four students in district boarding schools and boys boarding facilities schools, head teachers, subject teachers and policy makers. The population is 360 members with a sample size of 102 participants which gives us 28.33 %. Cohen et al (2007) claim that there is no definitive answer about the ideal sample size and the 102 selection of participants depended on the aim of the study and the characteristics of the population being studied. In addition, the 102 participants were not randomly sampled rather were purposively and conveniently sampled according the research questions. Prior to the actual research project, judgments about sample size were based on the number of variables being examined, their analysis, and the kind of statistical tests.

According to the nature of the study, both purposeful sampling and convenience sampling techniques were employed. Therefore, the study attracted 102 participants who voluntarily consented to be part of the study. In the study, open-ended and closed-ended questions were employed anonymously in the hopes that participants would provide their own explanations of what the subject meant to them. Teachers received the surveys at their places of employment, completed them, and then the questionnaires were collected. On forums set up for each school, questionnaires for students were posted. Participants were given the opportunity to share their opinions about secondary schools that educated girls in boarding facilities for boys using this strategy. Focus groups were carefully

planned to uncover impressions and emotions as well as to learn what female students believed about females' academic success at a boys boarding facilities school. A WhatsApp group was created just for focus group conversations, and a detailed timetable and agenda were established to make sure they went off without a hitch. Another choice for gathering data was through telephone interviews. Interviews form a conversation in which a researcher learns more about actual experiences from the interviewee's perspective, hence Kvale (1996) promotes the use of interviews. The benefits of interviews were that, in the first place, decision-makers provided me with more context for understanding the situation and makeup of boys boarding facilities schools in Malawi. It covered the political, economic, and historical context. Second, the strategy forced decision-makers to start actively focusing on the resources that females lack in the secondary school environment where boys board. Additionally, access to and analysis of head teachers' public university selection records as well as official statistics data from MANEB were performed. In order to determine the total number of girls who entered for Malawi School Certificate of Education, the number of girls who passed, and the number of girls who were chosen to pursue public university education, the study reviewed and analyzed official statistical data from the Malawi National Examinations Board for the period 2010 to 2019 for each school type. The researcher gathered the information while making visits to the schools. Due to the Covid-19 pandemic, it was difficult to meet with female students because on March 23, 2020, the schools had just been closed. An alternative approach involved using the group forums to distribute and receive questionnaires as well as to hold conversations. In the selected schools, however, it was still possible to speak with teachers and heads of school in person. Although it was

expected that the study participants would be easily attainable and that their contact information would be available, some of them could not be reached. The Covid -19 Pandemic's impact on school closures was one of the main factors. Instead, the researcher called the students and established up a forum group to communicate with them. The cost of this approach, though, was that participants received communication data. Another drawback was the absence of literature on girls' academic success while attending schools with boys boarding, as there is no recognized body of work on the subject. Instead, the researcher extended research on secondary school accomplishment in general for girls.

The use of the ant-deficit tactic became problematic from the teachers' side. Teachers blamed students for the low performance at MSCE, but students did not place the burden on the teachers. Instead of focusing on student failures, the AD-A strategy chose to highlight the lack of resources that both teachers and students required for efficient teaching and learning processes. Results may not be universally applicable to boys boarding facilities secondary schools because this study only included a small number of those institutions. From the research ethical point of view, Johnson and Gill (2010) argue that researchers need to consult with all interested parties for consent and agreements before caring out the study. In this regard, the study received approval from UREC dated 30:05:2019. Among other factors considered when approving included the nature of risk involved, age of participants, confidentiality, and protection of the participants.

The practical aspect of this study was the consent form and consent signature which delineated the nature of the study, from hazards or harm to the participants (Brown

& Cordner, 2013). In essence, participants' names were concealed and used just as letters and symbols to identify them. Additionally, by refraining from discussing the conversations with others or sharing the data with unauthorized people, the participants' right to privacy was safeguarded. Only the researcher had access to the data that was kept on the personal computer and the flash drive. By using bracketing, generating all possible phrases, and reaching saturation point, bias was reduced. It was crucial for the researcher to have prior professional experience in order to meet individuals and obtain their agreement. Thus, Chapter 5 wraps up the subject and is broken up into three portions.

The most significant results of the entire study are presented in section one's research implications, which are followed by recommendations that are based on the study's findings. The conclusion from the entire dissertation investigation is covered in the last section, with special attention paid to the findings and their relevance as well as the contribution made to the body of literature.

Implications

The first research question explored in this study was grounded in the idea that school differentiation has resulted in disparities in school resource. According to Rauscher (2018) unequal distribution of resources lead to lower levels of academic achievement. Accordingly, the first major practical contribution of the present research is that it provides much needed empirical data on the actual types of school infrastructure girls in Malawi need, their reasons for the infrastructure and what they fail to do most of the time there are no such types of infrastructure. This information is important given that the only other comparable studies in Malawi have compared boarding schools and

community day secondary schools and not girls in boys boarding facilities schools. It will be possible for legislators, policy-makers, teachers, other education professionals, and the general public to create and take actions on what girls in males boarding institutions would wish to have based on the findings from this study by thoroughly recounting the procedures of secondary establishment. For instance, the government wants educated individuals, including women, girls, and children, but there might not be any direct or immediate partners to ensure that the type of school infrastructure is suitable for the intended demographic.

The existence of academic achievement gaps between district boarding secondary school and boys boarding facilities school have potentially important implications for policy-makers in the sense that the human capital may be wasted. According to World Bank 2018, human capital consist of knowledge, skills and health which are the key drivers of development of a country. The poorer performing girls in boys boarding facilities schools are most likely to remain unemployed in formal or informal sector because of the failure to acquire the knowledge and skills which employers look for. Further consequences of the findings are that, depending on the choices of policies that the government adopts, girls in males boarding facilities schools with identical capability sets with girls in district boarding facilities schools end up with various degrees of achievements. Sen's (1999) claim that any educational system should have an overarching capability that has to grow other capacities, including gaining skills, opportunities, and other inherently important capabilities like critical thought, respect, as well as empathy is widely supported in this regard.

There are significant attainment gaps between pupils in schools, as was noted in the literature study (Echazarra & Radinger, 2019; Kawata & Sumida, 2021). Two studies for the region of sub-Saharan Africa had comparable results, which demonstrates that the gap is due to the disparity in student and school resources (Burger, 2011; Zhang, 2006). Although there are also significant gender differences, the differences by secondary school categories are the most pronounced, with boys performing better than girls in nearly all national tests in Malawi (Robertson et al 2017). The picture for inequalities by secondary school category is more disturbing considering that at national boarding secondary schools, almost every student has higher average attainment than students in other ordinary boarding schools, and community day secondary schools where students are day scholars attain the least grades.

There are more examples of systemic inequities experienced by girls from underresourced secondary school in Malawi. The study findings suggest that selecting girls as
day scholars in boys boarding facilities schools is one way of realizing least educational
outcomes, and this topic can be expanded in the future. It is believed that the Government
of Malawi through Ministry of Education has already felt the negative impact of systematic
inequities in the country's education system among the learners with more girls being
disadvantaged than boys, and the educationists look forward to seeing more improved
education plans to reverse the trend. That is why expanding research on girls' academic
achievement for social-economic benefits will be enormous in the following years
according. This work is one of the first research on girls' academic achievement in boys
boarding facilities secondary schools can be used as a practical guide for government's
strategic planning in drawing the next national educational plans.

The second research question explored in this study was grounded in the idea that there are multiple factors that impede girls' academic attainment (Husaini & Shukor, 2023) and a researcher has to identify the factors that most influence students' academic performance. In this regard, it is thought that the research findings are particularly pertinent in light of Agenda 2030 and Agenda 2063, which both call for efforts to educate the public, including women, girls, and children. This could lead to the inclusion of all equally significant and productive segments of the population, such as the youth who make up the majority of the Malawian population. This means that any failure to concentrate on resolving specific problems of the particular population before deciding what actions to take can make 2030 and 2063 unattainable. While this type of information could constitute a critical source of intelligence, the risk is that it can be disregarded or not valued enough simply because it may not fit the political aspirations of the day.

For instance, the authors mentioned the following unresolved specific problems, gender, high school dropout, family's financial background, medium of teaching, student's family status, geographical locations, students' previous semester marks, class performance class, test grade, assignment performance, attendance in class and lab work, general proficiency, interest in particular course, study behaviour, engage time and family support for study, previous schools marks, admission type, accommodation type, parent's occupation, and parent's qualification as some of the factors that affect students' academic attainment which require great attention.

According to the majority of the participants in boys boarding facilities schools, the girls' population who are day scholars is growing in all districts of Malawi. They are also concerned because there are no designated girls boarding facilities in the schools.

In this context, these participants believe that it is critically important that at least all students to be on the same level playing field with every student well housed in the school campus so that they no student feels left behind as the school prepare the students their future lives in society. In this regard, a female students stated, "In this context, what has become a big challenge for us is the absence of nice girls' hostels to keep us from commuting as day scholars. The results of this study revealed that the factors that mostly influenced academic success of girls in boys boarding facilities school males, were lack of girls boarding facilities and lack of supporting policies to the new investment policy. The implication of this is the rising of a correlative problem where teachers, parents and children discuss whether they would prefer association with boarding school or day school. This comes from the background that more studies have shown that students' performance is enhanced in schools with better physical learning environments (Barrett, Treves, Shmis, Ambasz, & Ustinova, 2019). When compared to the infrastructure in district boarding schools, a physical inspection of the classroom sizes and school sizes in boys boarding facilities reveals deficiencies in the policy designs of the schools. The premise for choosing a plan for school building, enlargement, or renovation to ensure equal access to high quality education is the gap between what is required and the availability of required infrastructure. According to the comments of the learner participants, they preferred a secondary school with boarding options for girls. This is contained in the discussion where most girls in boys boarding facilities schools opted to transfer to district boarding schools and none from district boarding school opted to transfer to boys boarding facilities school. Research conducted in Latin America in 2011 revealed a high correlation between violence, discrimination, and a lack of educational

opportunities and the absence of essential utilities such drinkable water and sanitary drains (Carrion, Imbusch & Misse, 2011). The analysis made clear that making improvements in school facilities and learning environments is not a luxury but rather a need.

Boys boarding facilities secondary schools construction often falls short of expectations, with girls often having to work in temporary buildings with poor teachers' supervision, inadequate spaces, and safety measures. As a result of this students and the nation pay the price for these deplorable building conditions in the form of lower educational achievement. Furthermore, the failure of by Ministry of Education to make improvements in the boys boarding facilities schools to a demonstrably old fashioned and failing building designs can give the girls the message that the government systems value them less than it does to their counterparts in district boarding facilities schools.

The third research question explored was grounded on an idea government is ready to provide quality secondary school education. The significant relevance of this study stems from its discovery of the singularity of the knowledge and information from Malawi's educational plans for the establishment secondary education system after independence. The results highlight a particular set of policy shortcomings, selection practices, and attitudes toward females selected in non-boarding secondary school that support lower academic attainment. Because the new investment policy is not supported by other policies and techniques that help females do better, the study's findings show that there is need to discard the oversimplified instrumental notion that girls can be selected in schools with boys boarding facilities as day scholars. Instead, the question of how to nurture and support girls who attend day schools may need to be addressed in

terms of how such capacities could be taught, developed, and improved through a secondary school infrastructure that meets a basic standard.

The main insight from the investigated school models is the central role played by selection policy when placing learners in different institutions of different educational resources and the educational outcomes. While parents make direct investments in their children's education, they are limited by the unequal distribution of school resources and the fact that they cannot choose where to enroll their children. What this indicates is that parents or quardians must make additional investments for their children who are chosen for low-quality public secondary schools, since it is only the best scoring students that are placed in high quality public secondary schools. The unfortunate part is that not every parent is able to make the same investments implying that a wider resource gap between district boarding schools and the boys boarding facilities schools becomes a great setback to the girl child in boys boarding facilities schools. However, this study asserts that there is valuable capability among the girls and they too can equally gain knowledge and skills to successfully complete secondary school education leading to university education. This study supports the notion that girls in boys boarding facilities schools along with other student groups in national boarding schools and district boarding schools, with adequate supports and resources academic success is attainable.

From an operational perspective, the results of this study provide practitioners with a body of information from which to evaluate and interact with girls enrolled in secondary schools with males' residential facilities to see whether they have access to the right kinds of resources for their academic achievement. This research offers concrete proof that is crucial in making boys boarding facilities schools attractive to girls so they

will enroll and complete their studies there. However, in order to replicate this success and boost the success rates of girls attending boys boarding facilities schools, there must first be better coordination between policymakers and the entire secondary school system to eliminate selection policy misunderstandings and create pathways for girls to enter any category of secondary schools. Once in that category of secondary schools, there must also be a deliberate effort on the part of teachers, parents and guardians, policymakers, and a school's administration to provide the right environment for the girls to excel in their studies. This is supported by Schlechty (1997), who opined that educators should think about what genuinely motivates each student and how to create materials that will address those motivations. In this study, it is believed that girls are highly motivated by the presence of girls boarding facilities and that absence of girls boarding facilities demotivate the girls and hence low academic achievement.

While acknowledging that Malawi has a highly differentiated secondary school education, Bearne (1996) and Tomlinson (1999), describe differentiation as an instructional strategy in which teachers proactively modify curricula, teaching strategies, resources, learning activities, and student work to meet the diverse needs of individual students and small groups of students in order to maximize each student's learning opportunities. In fact, disparities in the educational system, especially at the post-secondary levels, may even serve to exacerbate existing social disparities. Although numerous obstacles still exist, Malawi government has made significant attempts to use the educational system to lessen the effects of poverty and social isolation. However, there are concerns that ensuring that educational opportunities are provided fairly across all levels of education and ensuring that the expansion of higher levels of education does

not come at the expense of sustaining high-quality secondary school education. These issues must inform investment decisions since they will influence the results. Additionally, it is supported by economic arguments that investing in universal primary education will have a major positive social impact (Chimombo, 2009 p. 298). However, more equitable access to educational opportunities can promote faster economic growth. Therefore, secondary schools do not necessarily need to be greatly differentiated in order to offer quality education. Other academics dispute this assertion, arguing that secondary education differentiation will give students skills, knowledge, and aptitudes, negating the benefit of vocationalization (Pavlova & Maclean, 2013; Oketch, 2014). Investments in secondary vocational education can therefore aid in Africa's economic development. Additionally, Pavlova and Maclean (2013) contended that by emphasizing skill development more in secondary schools, societies economic and labor force demands will be better met and that vocationalization of the curriculum is both desirable and acceptable. Therefore, it is important to take into account the degree of curricular vocationalization when integrating vocational subjects into secondary education. This indicates that the proportion of the curriculum that is made up of vocational courses reflects the level of vocationalization. The education of home economics, cookery, and needlework, for example, in district boarding facilities schools falls short of what society needs in terms of knowledge and abilities. Thus, secondary education needs to be made more vocational in order to equip students with the knowledge and abilities they'll need in the workplace. Young people are unable to compete in the global labor markets because they lack employment-related skills and abilities. According to Akram (2012), secondary education must be more vocational in order for it to serve as the cornerstone of a

sustainable society. This statement emphasizes the importance of secondary education being more vocational.

The use of the economic model in Becker and Tomes (1979) helps us to interpret that educational attainment is an investment decision, which is greatly subject to financial constraints. An investment decision is an action that is made in anticipation for the highest benefits. (Puspitaningtyas, 2013; Shahzad et al., 2013). In this study, obtaining a Malawi School Certificate of Education, university education and getting employment in formal or informal sector are the highest benefits outlined by the learner participants. There is now robust evidence that human capital is a key determinant of economic growth and emerging evidence indicates that it is also associated with a wide range of non-economic benefits such as better health and well-being. Investment in human capital, and by implication in education, has thus moved to centre stage in strategies to promote economic prosperity, fuller employment and social cohesion. As a result, education is increasingly considered an investment in the collective future of societies and nations, rather than simply in the future success of individuals. The first implication is that resources will be scarce if human capital is not invested in effectively. However, if human capital is invested in effectively, knowledge can become not only abundant but also unbounded and self-generating, which is a crucial distinction for future economic prospects.

In such a model, a rise in economic inequality in Malawi is believed to have made secondary school system highly differentiated and then more binding to the disadvantaged children, and hence reduce academic success.

Likewise, the use of the deficit model of education helps to interpret that students are blamed for their failure (McKay & Devlin, 2016; Poon et al., 2016). Though Davis and Museus (2019) contend that it might be difficult to ascertain what actually constitutes deficit thinking in scholarly circles, the current study ascertain that the selection policy is a manifestation of deficit thinking that ignores systemic influences that shape disparities in social and educational outcomes (Chambers & Spikes, 2016). This implies that deficit thinking has a historically base in dominant classist that describe oppressed people as deficient (Bruton & RoblesPiña, 2009). The selection process for non-boarding schools, including community day secondary schools, appears to strongly imply that the pupils who are chosen are intellectually undeveloped and unable to study some of the courses taught in boarding schools. Furthermore, historical school segregation policies in Malawi were based on the fallacy that some members of the populace were cognitively inferior and hence deserve lower educational opportunities. Deficit thinking has a detrimental impact against this backdrop by leading to a number of poor outcomes that support authoritarian structures and educational and social inequalities. For instance, the teachers in boys boarding facilities school had lower expectations of students from their schools and literature indicates it as a source for the disengagement of students (Shields, Bishop, & Mazawi, 2005) and thereby undermining students' success (Pérez, Ashlee, Do, Karikari, & Sim, 2017).

Recommendations for application

The teachers in this study had hopes for the academic development of the female students in the males' boarding schools, particularly in terms of passing the Malawi School Certificate of Education examinations and being accepted into a public university.

They believed that if given enough time and assistance to develop the necessary academic knowledge and abilities, the girls may succeed on the examinations by earning the required pass marks. They also believe that exposing girls to the proper learning environment, which includes staying in residential rooms in the school campus, may help them achieve higher test scores. They believe that girls should have more study time while yet being supervised by teachers.

The policy makers also affirmed that their ultimate goal was for all students to have the same opportunities to succeed. One policy maker stated, "When girls are selected into various secondary school categories, they are looking at students graduating and meeting the proficiency on the state standards." Based on the responses from interviews, policy makers in this study demonstrated features consistent with the review of literature regarding high expectations for students that are deemed to have passed the final primary school examinations. According to Shannon and Bylsma (2007), having high expectations for students, particularly girls, is an encouraging step. In this study, the factor of students' high achievement is derived from setting an enabling student environment for the girls to achieve their academic goals, without which girls in boys boarding facilities will continue scoring below set standards.

On the other hand, despite the fact that an analysis of quantitative and qualitative data reveals that the Ministry of Education did not offer girls boarding facilities in schools with boys boarding facilities, they believed that the various secondary school categories had a role to play in raising the performance of all students, particularly girls, on all standardized assessments. The participants expressed anticipation for the girls' improved academic performance by observing and meeting students' expectations

regarding the Malawi School Certificate of Education Examination pass rate and public university selection rate.

A cliché goes that educating a girl is equivalent to educating a whole country. According to Summers (1994), children born to mothers with five years of primary schooling are 40% more likely to live past the age of five than children born to mothers with no formal education. Schultz (1994) reports that a year of schooling for girls reduces infant mortality by 5% to 10%. As a result, educating a woman has a bigger impact on the lifecycle of her children. There is also evidence of more productive farming techniques, which are linked to increased female education resulting in a 43% decrease in hunger (Haddad & Smith, 1999). Further, Hill and King (1995) add that educated women bear less children because they get married late in their life. There is more opportunity for employment and earn a higher wage if she has basic education. However, this sounds challenging in this 21st century where there is high unemployment rate in most countries. According to the World Bank (2014), girls who receive quality education develop their literacy, numeracy, cognitive, and social abilities, which improves their readiness to enter the workforce and earn a living.

According to the study's findings, 16 (66.66%) of the 24 teacher participants were men, and 8 (33.33%) were women. According to some studies (Dee, 2007; Lim & Meer, 2015), student outcomes are positively correlated with student-teacher gender matching. The results of Dee's study are consistent with research showing that gender matching raises the academic achievement of female secondary school students in South Korea and China, especially in science subjects (Lim & Meer, 2015; Xu & Li, 2018). Therefore, it is surprising to see that in the absence of teacher gender parity in both school models,

girls in district boarding schools outperformed girls in boys boarding facilities schools. Dee (2007) observed that having a teacher of the same gender is connected with an increase in student achievement for both female and male students, so this result needs to be interpreted with caution. The unexpected finding is that gender ratios in Malawian secondary schools continue to show that there are fewer female teachers represented in the secondary schools that were sampled. Due to the important roles teachers can play on the academic and developmental paths of their students, gender of teachers is a frequently discussed subject in educational research. For instance, Hwang and Fitzpatrick (2021) found that female learners score better in mathematics when they have female teachers. The Ministry of Education and the entire government machinery should start focusing on this issue as well, so that secondary schools can have more role models to improve learners' academic performance.

The study's findings demonstrated that one teacher has a master's degree, and the majority have degrees and few teachers have diploma certificates. The study also showed that the teachers' areas of training and expertise were evenly dispersed among them. This suggested that because the teachers were well qualified, it was expected of them to assist the students in achieving high marks across the board. Despite the claim made by Aina, Jacob Kola, and Olanipekun, Shola (2015) that a teacher's character matters more than their level of certification, some authors have argued that the qualification of secondary school teachers is crucial for improving students' academic performance (Bonney, 2015; Musau, 2015). According to Casian, Mugo, and Claire (2021), a teacher's educational background influences how well they are able to teach their subject matter. This, in turn, contributes to the overall improvement of the students'

grades. Kingsley and Omoregie (2020) in their study of the effect of teachers' qualifications on students' academic achievement in secondary school in Delta State found that students who were taught by qualified teachers in secondary schools outperformed those who were taught by inexperienced teachers. The surprise finding that girls in boarding schools for boys performed poorly suggests that there are other factors influencing the girls' academic performance in addition to the teachers' qualifications. The findings of Casian et al. (2021), indicated that teacher qualification contributes 36.5% of students' and the remaining 63.5% is attributed to other variables. The findings of the null hypothesis demonstrated that there is no significant difference in the level of training of the teachers in the two school models. This shows that the qualified teachers in the boy boarding facilities schools were able to impart knowledge and skills with certain professional standards to raise the girls' academic performance. Ewetan and Ewetan (2015) found that instructors' classroom experiences had a significant impact on students' academic achievement in Mathematics and English language as determined by how well they performed on national exams and as perceived by the respondents. It has been demonstrated that schools with more instructors with more than ten years of classroom experience outperformed those teachers with fewer than ten years of expertise.

According to the data provided in this chapter, the majority of the teachers who participated in the study at both the district boarding schools and the boys boarding facilities schools had a solid amount of experience—between 10 and 14 years—in the classroom. Contrary to predictions, this study discovered a considerable gap between the academic performance of girls attending district boarding schools and boys attending residential facilities. This unexpected result indicates that the factor influencing the poor

academic performance of girls in schools with boy residential facilities was not the experience of the teachers. This suggests that there are several possible explanations for this result. As a result, the findings of the null hypothesis demonstrated that there is no significant difference teachers' years of experience in the two school models. This shows that the experienced teachers in the boy boarding facilities schools were able to impart knowledge and skills with certain professional standards to raise the girls' academic performance. In general, experienced teachers outperform their less experienced counterparts in improving student achievement. This does not only occur because schools and classes with more advantaged children tend to be allocated more experienced teachers. Even after properly accounting for this fact, teachers still discover that more experienced teachers are generally more productive than those with less classroom experience.

The study shows that the majority of teachers have spent an average of 5 to 9 years working at the same institutions. Because Malawi lacks a clear regulation on teacher transfers, it is unclear if 5 to 9 years in Malawi constitute an-overstay. The teachers' long tenure in their current institutions may have reduced some of their effectiveness. When individuals are transferred to new stations, their performance may improve, especially if other problems, such as personal barriers that impede it, are effectively resolved. According to Nabachwa (2012), transfers in schools are well-liked by teachers since they promote their innovativeness and flexibility at work as well as give them more opportunities to participate in extracurricular activities, all of which help them perform better. Additionally, teachers who spend too much time at the same school become demoralized and accustomed to the same atmosphere, which inhibits innovation

and lowers teacher effectiveness. Given that transfers could be costly, another option is to reorganize the educational institutions to enable teachers to participate in other extracurricular activities. However, this data should be interpreted cautiously because transfers can also result in school instability, which lowers student performance. The study has shown that teachers cannot select the type of public secondary school they wish to work for. Furthermore, neither can a public secondary school choose its teachers. Rather, the Education Division Manager allocates teachers in each of their public secondary schools and it appears there has not been any period defined for the teachers to rotate within the schools. Focusing on teacher characteristics, therefore, is quite favorable for solving the problems associated with girls' poor academic performance. It is noted, however, that having the unguided nature of teacher allocation policy adopted in public secondary schools will in the end be attributed to girls' poor academic performance. It was for this reason that teacher characteristics' were tested.

When female students said that boarding school taught them "to be themselves," they meant that boarding schools teach students to be independent of their parents and to begin focusing on matters that are useful to their life. According to Masharova, Punchy, and Vahrusheva (2020), independence is a multifaceted personal education that is formed in needs. It is an education that manifests itself in the learners' activities and ability to set goals for themselves. This is a claim that boarding schools provide a unique education that includes full-time, part-time, evening, and external studies that are not available to girls that are selected in boys boarding facilities schools. Contrary to the above responses, girls in the boys boarding facilities indicated that, they miss out some of the school activities because of the state of day scholars. The findings in the present

study confirms that girls in boys boarding facilities schools are absolutely not on full time study and therefore, they are likely to underperforming.

Girls who were selected in district boarding school stated that they had no regrets about attending a district boarding school. In contrast, the majority of girls in boys boarding facilities schools did not want to be associated with boarding facilities schools. According to the literature, failure to acquire admission to a preferred school has a detrimental impact on the learners' academic achievement (Brandt, 2020). The findings contribute to our knowledge of self-realization education, which appears to be taking place in a district boarding school. Self-realization is one of the pillars of a happy and fulfilled existence. It motivates learners to realize greatest potential and become the person they desire. It also makes learners more self-assured, conscious, and focused. In addition, self-realization permits students to communicate deeply with their inner selves and those around them. This current study confirms previous findings and adds to our understanding that self-actualization among girls in boys boarding facilities schools appears low because students believe they did not develop their full potential and were consequently placed in second tier secondary schools. However, girls in boys boarding facilities schools can achieve self-actualization by receiving support from parents and the community by meeting basic requirements that may not have been met.

On the mention of parents' support, girls in boys boarding facilities school felt that the PTA funds which are too small to make a huge impact in their schools. This is due to the fact that these schools lack major infrastructures. In addition, the girls perceived the introduction of PTA funds as extra burden pressed on their parents who seemingly appear to be struggling to raise enough money for the girls' upkeep and other school

requirements. Even though secondary schools have become free, they are not totally free in the sense that there are still more fees being charged to the students for other school operations. It is only the tuition fees that has been abolished but all other fees are being paid. One example is the Malawi National Examinations Board that charges examination fees for a candidates write the subjects.

However, it is noted in the findings that there are several challenges when it comes to the implementation of education policy and identification of policy gaps. The challenges include co-ordination issues, inadequacy of organizational resources, and reactions against policy (Pont & Viennet, 2017). Therefore the findings of this study underline the important role of policy makers and mid-level managers' in secondary school, especially with regard to interpretation of the educational policies. It is very important policy makers and mid-level managers in schools to interpret the regulations and policies governing secondary school management from the higher level to the lower level so that policy implementation becomes easy. According to Yanow (1995), policy meanings are crucial, yet comprehending them can be challenging. It necessitates deliberate interpreting attempts for students and public to understand. It is believed that proper interpretation of the selection policy can bring motivation among girls in boys boarding facilities not to underrate themselves and refrain teachers from underrating students under their charge.

If educators, the general public, and policy makers collaborate, it is thought that they will be able to both uncover policy gaps in educational systems and reevaluate misconceptions about the selection criteria in order to create an anti-deficit model. More people are realizing that policies don't succeed or fail on their own merits; rather, the process of implementation, which mostly entails establishing supporting policies,

determines how far they may advance. Given the high degree of comprehension, the government must consequently realize that more work needs to be done to prevent the new investment strategy from failing. General public is advised start showing an interest in how the government policy processes work. The fact that the top students are selected to study in the best educational facilities with the best tools for teaching and learning exemplifies a factory model of education in which the pupils are the products. The results of the current study show that the factory model is irrelevant because other policies, including those pertaining to teacher allocation, teaching and learning materials, and infrastructure, are thought to have been adopted concurrently with the new investment strategy.

The study's implication is that the boys boarding facilities schools are currently unable to meet the girls' medium- and long-term productivity-led growth needs due to decades of government investment insufficient to support such growth. Therefore, Malawi's Ministry of Education should look into other options for enhancing the academic performance of females attending schools with boys boarding. In the evaluation of school buildings and equipment in terms of innovative approaches, teachers and learner participants consider the physical infrastructure of schools insufficient in terms of the emergence of innovative ideas in the Malawi contemporary society. It is seen that they criticize the use of no standard drawings in the planning of school buildings and equipment and the establishment of secondary schools that do not meet the needs of the learners. It is suggested that educational expectations and needs of girls in boys boarding facilities schools should be taken into account in the construction and supplying teaching equipment in boys boarding facilities schools. These findings support the results of the

research that the physical and social environment of schools is important on the motivation, attitude and behavior of education staff and students (Özer, 2014), and that there are no standards in terms of physical structure, equipment, infrastructure and materials (Göksoy, 2017). Innovative educational models are primarily focused on addressing social-economic, psychological, and organizational-regulatory issues that the factory model does not address. These features of innovation education model clearly define the general atmosphere and circumstances in which innovative processes occur and which either hinder or support the process. Therefore, this research study recommends that the innovative educational approach be used for the following useful reasons.

Firstly, the innovative educational model is important in recognizing and responding to girls' unique needs in boys boarding facilities schools by defining the general learning environment and conditions which rightly boost girls' academic achievement. It is illogical to subject learners in two different learning environment and expect similar academic performance. The existing model allows girls in district boarding school to study Home Economics and Cookery because of the district boarding school has such science laboratories which are not found in boys boarding facilities schools. According to Faili, Houser, Krutka, Province, Roberts, and Pennington (2022) environments can shape and form students' and teachers' identities, just like, students' and teachers' lived experiences impact classroom environments. The reason is that students that are selected in district boarding schools may have different confidence and motivational levels from those selected in boys boarding facilities secondary schools. First and foremost, innovations in education can raise standards of instruction and

enhance student learning. For instance, modifications to the educational system or to teaching techniques can help to tailor the educational experience. New school organizational trends and the usage of information communication technology are key components of customized learning trends for the girls selected in boys boarding facilities schools.

Secondly, the Ministry of Education need to consider allowing girls in boys boarding facilities schools and in other second tier schools to delve into subject areas of interest during the last years of secondary school to allow specialization at the earliest age in humanities, sciences and mathematics or business. This educational model will make other second tier schools play more competitive roles in shaping students into venturing non-university fields thereby making secondary school as attractive and competitive in any secondary school category. In addition, the model will also allow students to pursue careers according to their abilities and strength and that university education can no longer be a yard stick to the full attainment of an educated person. Through interviews, focus group discussions and questionnaires, the girls in boys boarding facilities schools demonstrated the need to explore and be accorded the freedom to exercise and feel their personalized experiences in the areas they are specialized and interested. The girls held the opinion that enrolling in a university or college did not have to be the ultimate goal of learning because the majority of girls from boys boarding facilities schools do not get chosen for public universities. According to the participant's comments, the current educational model does not immediately respond to the society's shift to a more advanced stage of development or to the revised educational objectives.

Thirdly, an innovative educational model will push for a more or less standardized investment plan that is applied in the same way in all public secondary schools expect for the private schools. From the schools visits that I made, the structures in the two district boarding schools were uniformly student-centered while those in the two boys boarding facilities were not uniformly students-centered despite the boys boarding facilities secondary schools belonging to the second tier schools. This was a clear indication that the schools are not established from a standardized investment plan. During the visits to the schools it was vividly noticed how the girls in the boys boarding facilities schools were trusted with taking on their own accommodation. This fact was also reported by many of the teachers who responded to the questionnaires that girls in the boys boarding facilities do not perform well during national examinations because the schools do not cater for the girls' accommodation. Accommodation was important in keeping the girls from moving long distance as well as reducing disturbances in their studies.

In the face of quick changes in society and the economy, education should continue to be relevant (Barrett, 1998 p. 288). Therefore, the education system should make the necessary reforms to accommodate societal demands. For instance, educational systems must implement organizational, teaching, and learning strategies that have been linked to the development of "skills for innovation" (Dumont & Intsance, 2010; Schleicher, 2012). This study advises that innovation be defined as the adoption of a new or noticeably improved educational product or service, procedure, marketing plan, or organizational strategy in school setting, with sound managerial choices, and connections with the outside world. In this scenario, the government through the Ministry of Education could introduce new products and services through the introduction of a new

curriculum, textbooks, or educational resources, while the new processes for delivering their services would include the use of ICT in e-learning services and new ways of organizing their activities, such as using ICT to communicate with students and parents. Courses would be priced differently as part of the new marketing strategies. These innovative procedures ought to be viewed as advancements because they aim to enhance the delivery of education in some way. In this way, schools should not be left alone to handle the challenging process of change on their own since they do not operate in a vacuum. Instead, they require help from a variety of actors and stakeholders, as well as from policy makers.

The objective of standardized investment plan in all educational centers including boys boarding facilities secondary schools is for students to receive the same quality education and reduce the achievement gaps that have arisen between the district boarding schools and the boys boarding facilities schools as a result of applying different investment plans in the secondary school sector. The more traditional form of new investment policy operates in a top-down approach where the government regulates the type of investment that is required in a particular school category and allowing the community to come in if they feel the deficiency and this is the characteristic of factory model of education. Apparently, it was difficult for the policymakers to clearly define the poor state of infrastructure and resources in boys boarding facilities schools instead, they assumed what students would accept and anticipate to experience in the both types of secondary schools. This describes how it has taken long for the Ministry of Education to invest by allocating equal and adequate teaching and learning resources in schools. This therefore calls for the communities and the government to create models based on the

experiences and jurisdictions to ensure that existing standard models are used and customized to the specific requirement of girls in boys boarding facilities secondary schools. Notwithstanding the challenges of coming up with standardized investment plan as reported by the policy makers is the constraint on finance; but this should not be at the expense of forfeiture of cost saving and better academic outcomes.

Lastly, although it was noticed from prior studies that there are various reasons why learners in secondary schools face access issues to vocational education, a significant obstacle in Africa is the scarcity of secondary schools that teach these topics. If Malawi is to flourish, new vocational primary and secondary schools must be established in the appropriate educational divisions and areas. This is done in recognition that neither secondary education nor higher education can provide the crucial human capital. The results of this study show that resources and school infrastructure are essential elements of high-quality education. The teaching and learning process and the students' learning outcomes may both be significantly impacted by subpar facilities. The survey found that funding for girls' boarding schools and other teaching and learning resources was lacking. Similar infrastructure would be required for vocationalization to support vocational instruction in secondary schools. However, it is clear that not all vocational fields require significant financial outlays; some can function with locally produced teaching and learning materials and recycled resources. Therefore, it is necessary to introduce innovational such as the vocational skills at all levels of education, including primary and secondary, in order to bring the knowledge and skills that are needed by the state. The African Union Agenda 2063, which is focused on creating "the Africa we want," and the increasing recognition of Africa's potential as an economic power

are intended to inspire long-term plans in human capital development, technical innovation, and education and training. The strategic goals of the Continental Education Strategy for Africa 2016–2025, the first ten-year implementation blueprint of Agenda 2063, include reviving the teaching profession, developing and renovating pertinent infrastructure, utilizing information and communication technology, ensuring the acquisition of necessary knowledge and skills, enhancing STEM and expanding TVET opportunities, and post-secondary.

As stated in chapter three in the methodology section, the hardest method of data collection was telephone interviews because, it required a lot of time, patience, and enough airtime. The method proved expensive. The response rate was relatively low as not all participants took part in the interviews. Some of the female learners reportedly had no telephone handset at the material time and some complained of unstable internet connection. The majority of the participants were highly influenced by interests of the study, communication methods which included free data bundles, and assurance of privacy and confidentiality. Those students who showed interest but unfortunately failed to secure telephone handsets did not participate in the survey and also those students that were out of reach. This was not expected because all participants gave consent to participate in the study. Therefore, the researcher failed to replace the participants with another set of respondents but went ahead with the respondents that were available. Participants who took part in interviews had a response rate of 70.81%. In general, a low response rate, according to Schutt (2016), suggests that the samples employed may provide results that are biased or unrepresentative, undermining the validity of the variables the researchers are trying to examine. As a result, a response rate of up to

70.81% was employed to analyze the data. The study demonstrated how important it was to recruit respondents who had access to the Internet and were enthusiastic about the topic of the survey. Similar to what Margo, Prybtok, and Ryan (2015) found, there was a significant difference in response rates between participants who received extra credit and those who did not. The generalizability of the data gathered can be harmed by low participation rates, which is especially crucial (Biemer & Lyberg, 2003; Marszalek, Jacob, Kohlhart, & Cooper, 2011; Rogelberg & Stanton, 2007).

Recommendations for future research

This chapter is based on the results obtained in Chapter 4, and therefore a discussion of the finding is presented in this chapter. The study uses the findings from Chapter 4 to support the proposed assumptions. All research questions will be answered subsequently and finally; the achievement of research objectives is determined. In this current study, there are several gaps in our knowledge around girls' academic achievement whilst learning in boys boarding facilities secondary schools that follow from the findings. Therefore, would benefit from further research in the areas pointed out hereunder. This study only begins to reveal the educational policy potentials and setbacks of the new investment policy. There are a lot of unanswered questions exposed within the research findings, which have been suggested here as areas for future research. Therefore, the research findings in this article contain several important messages for policymakers and schools. It is argued that the disproportionate classification of secondary schools in Malawi has been a national concern and the new investment policy adds more public outcry as regards the quality of girls' education (Kafumbu, 2020). A report established by Fossberg and Fredriksen (2014), hinted at the low secondary school

development in the Sub-Saharan region when compared to other regions of the world. Given that there has been rapid population growth, increased primary school enrollment, and high completion rates, governments have no option, but to increase their support for secondary education. However, in Malawi, the government's reaction has been employing several interventions that appear to be addressing secondary school access and leaving out quality.

In this regard, it is recommended that government starts providing girls boarding facilities in schools that have been operating without such facilities. Without addressing financial constraints and the weak institutional capacity, female secondary school education in most of SSA would still appear to be serving a small elite, thereby leaving out the majority of the population who are women and girls. It would be valuable to gather results about the girls while still in school and after they have completed secondary school education to find out other educational outcomes such as employment and other aspects of life considering that there are no tracer studies to know where they go or how they fare (MESA, 2019, p.87). Further explanation from this study is that a longitudinal study would be appropriate so that more time would be spent interacting with the participants. For instance, in a policy shift in which the government through world Banks' SAP, the government may not have conducted a robust full-cost benefit analysis in adopting some of the educational policy changes, and therefore further research would be needed to develop approaches and carry out a full cost-benefit analysis of public secondary school investment. The study would also help in gathering qualitative data on the participants' experiences and perspectives of research partners who have had negative experiences. The participants may be more likely than enthusiasts to volunteer to participate in such

studies in which government involves their taxes to educate part of the section of the Malawi population. Similarly, the study may also extend to explore the rare experiences of marginalized and seldom-heard groups involved in government decision-making positions. Usually, government expenditure on public goods and services involvement in research remains a contested issue with strongly held positions for and against it. Nonetheless, the study would be helpful to further explore the value of research findings and researchers' positions on public spending and its effectiveness for enhancing educational policy changes which may or not be based on empirical research evidence. Even though the study may have some research methodological challenges, such long terms investigations would help to quantify the impact of public spending on girls' secondary school education that are selected in boys boarding facilities secondary schools on such key indicators such as participant's involvement in the social and economic development of a nation. One methodological lesson that has been learned from conducting this research study has been that most of the participants successfully reflected on the impact of the policy shift on the learners' academic participation and their levels of achievement. This was evident from participants drawn from boys boarding facilities schools. They ably answered the questions by reporting exactly how policy change aspects influenced the individual as well as group dynamic of the girls' learning processes. Hopefully, the research would yield more significant results. In a longitudinal study, researchers repeatedly examine the same participants to define any changes that might occur over a long period. It is argued that a longitudinal research design allows researchers to investigate participants in their existent time and therefore, it becomes easier to establish the real sequence of events and establish the cause-and-effect

relationships. The challenge that one anticipates when conducting a longitudinal study is that some participants drop out of the study and this may lead to failure to conclude results. Preferably, the study would need to use a larger sample size from diverse demographic information of not only female students but also male students, head teachers, teachers, school community representatives, and Ministry of Education officials.

Due to time and resource limitations, the current inquiry did not include male students or members of the school community. The secondary school performance of girls attending schools with boy residential facilities was given more consideration in the current study. However, aggregate girls' performance during national examinations is still lower than anticipated (Robertson, et al, 2017). This implies that even girls in district boarding schools in Malawi have their type and nature of problems that need to be explored. Therefore, a study targeting girls in district boarding facilities schools would be useful in determining the future of the girl child and that of Malawi. This is important in the context that a recent study by the Arts and Science Group of Baltimore for the Association of Boarding Schools, (TABS) alluded to the fact that, students from a boarding school are more likely to obtain an advanced degree and develop their career paths faster than those girls in non-boarding schools. Furthermore, research has also shown that students in a boarding school feel more prepared for higher challenges, such as Colleges and Universities than their counterparts in non-boarding schools. One would therefore want to find out what is in a boarding school that leads to steady students' personal growth and long-term achievements. An extension to the above is the argument by Ullah and Ullah (2018) that young girls have been dominating boys in terms of educational performance across the sphere and it is prominent in the global north as well as in the global south. It is further alleged that data gathered from the 1990s and 2000 strongly suggest a rapid dramatic change in which girls seem to outperform boys in education in respective of where this is taking place whether in the northern or southern globe (Ozaki, 2018). Several studies that were conducted on this consistently reinforce the findings of Parson and Ozaki (2018) that girls are outperforming boys in education and that the performance gap is tilting towards girls. There is great evidence that boys are not only outperformed in academic achievement at the secondary school level but also at college and university education (Minello and Blossfeld, 2017). The need for the recommendation for future research is the fact by that the trend of girls' outperformance in education is not limited to the developed world but has been experienced in the developing world (Ullah & Ullah, 2018). The danger is that majority of the world's illiterate people are found in developing countries and if this is the state of affairs in developing countries, one wonders how the state of affairs would become in underdeveloped countries. Further studies conducted in the Kenyan society indicated that girls performed better than boys as shown in their grading system (Datta, 2014). Ullah and Ullah (2018) quoting Kabeer (2005) argue that a similar study conducted in Zimbabwe reaffirmed that girls outclassed boys in academic achievement at both school and college levels. Further evidence is that Yenilmez (2016) confirms that, girls have often outclassed boys not only in secondary schools but also in higher education in Turkey as well. Thus, this study asserts that the current trend needs to be examined in different socio-economic contexts and across disciplines as it has been argued that girls lag behind boys in all national examinations at all school levels (Roberston et, al., 2017)

Thirdly, the findings from the female students in the boys boarding facility secondary school demonstrate a contrary view on how parents could be involved in school management. The fact that learners responded negatively about their parents becoming members of the Parent Teacher Association by the children being learners in the school, requires further exploration of the roles played by communities. Further studies are needed to find out the parents' views if they are in tandem with the sentiments of the female students in the boys' boarding facility secondary school. The study would be of significance in underscoring not only what the female learners reported but also how teachers, head teachers, and the general public perceive the roles and composition of PTA in the management of secondary school education. This recommendation is backed by a study that investigated the influence of PTA on the administration of schools in the Egor Local Government Area of Edo State, in Nigeria. The purpose of the study was to determine the influence of the Parent-Teacher Association in the schools' administration, especially in the Egor Local Government Area of Edo State (Championz, 2018). Governments have repeatedly stated that the cost of education has become so enormous that it cannot be entirely left in the hands of governments alone, highlighting the need for Parent Teachers' Associations to work hard in collaboration with the schools in their communities. The researchers also attempted to highlight specific roles that the Parents Teachers Association (P.T.A.) need to play as partners and stakeholders in educational development in schools (Agrim, Gabriel & Pauline, 2020). Similarly, another research study examined the traditional roles of the Parent Teacher Association (PTA) in secondary schools in Nigeria. The study made some recommendations on how the PTA's roles can be strengthened to improve community participation in the delivery of highquality secondary education. These include increasing the PTA's involvement in educational financing and giving them more responsibilities in classroom administration; and providing direct labor for the completion of school projects rather than outsourcing contractors (Alonge & Ekundayo, 2012). Most studies concluded that PTA might significantly produce better results, academic performance, and quality of results. The study being recommended is paramount considering that apparently, there is a drastic increase in the number of Parent Teacher Association (PTA) cross the nation in both public and private secondary schools. Maier et al. (2017) discussed several benefits of involving the local community, and this included PTA's activities. The report shows that in some of the schools, PTAs were even helping low achievers to improve their school outcomes. Bentley and Cazaly (2015) seem to strongly demonstrate that resilient proficient association between the schools and the parents of the learners plays a vital role in improvising the learners' educational outcomes. However, there is a need to spell out the exact roles that parents are expected to play to improve the girls' academic performance. Initially, the establishment of PTAs in the Western world was largely involved in fundraising and making sound communication between schools and parents and vice versa. Ultimately, many people criticized the PTAs that they were playing a very role profile in the schools and as a result, many parents resented being associated with PTAs. Having few members in the PTA meant that they could not raise more funds for the schools and this was a huge task for the PTA to get re-organized to attract more new PTA members. The findings in this study reveal that learners feel their parents need not be required to directly make monetary contributions to the school. Ntekane (2018) cited Llamas and Tuazon (2016), that through Parent-teacher partnership, it is possible for

parents to positively impact children's education. Ntekane further elaborated those parents can be involved in their children's learning by among other roles becoming part of PTA committees, showing concern about the learners' academic performance, and attending PTA scheduled meetings where they can raise issues that can influence school management to work towards the fulfillment of government's educational goals. In addition, through the suggested research study, current challenges that parents/schools and the Ministry of Education are facing might be ironed out by using the findings from the proposed research study. For instance, Ntekane (2018) notes that some parents fail to be fully engaged with the schools due to weak links between school leadership and communities and therefore, communities might feel that it is not their duty to be involved in the schools' matters. In summing up the discussion, Ntekane (2018) cited Clinton & Hattie, (2013) that parental involvement is where parents are directly involved in the education of their children. They involve themselves and are involved by the school and teachers in the learning process of their children. By so doing they fulfill their duties as parents in making sure that the learner is assisted in the process of learning as much as they possibly can. It appears the perception is that parents are encouraged to enquire about the performance of a learner in schools. This entails the parents taking a role in communicating with their children as a way of cementing a concrete relationship with them so that the process of advising, encouraging, mentoring, leading, and inspiring is successfully done. Hornstra, et al., (2015) as cited by Hanitha and Lawrence (2017) note that, teachers use different teaching strategies when teaching in class. Based on this understanding, it is suggested that further research would be conducted to investigate the teaching strategies to be employed by teachers in boys boarding facilities school to

improve national examination results for the girls. Most studies show that several subject teachers usually engage boys more than girls in learning by making the content 'relevant to the boys' lives' leaving out the girls. This is suggested as one of the reasons for the girls' academic results. The fact that the current research findings do not discuss the teaching strategies used by teachers in a district boarding facility school for the girls to perform better than their counterparts in a boys' boarding facilities school, forms a good basis for further study. In support of the above recommendation, Skalli (2015), examined the politics, economics, and ethics shaping the recent focus on girls from developing countries. It examined what he called 'girl effects' which are responsible for describing how different girls are positioned within the related policies and interventions by whom and for what purposes. The recommended area of study remains significant in the teaching of learners, because of the complexity of teaching. In a paper presented at a workshop Ayua (2017) discussed the importance of planning for teaching, using suitable teaching strategies for the sake of reaching educational objectives for the all-round development of the learners. The fact that most teachers reported some negatives about the learners in boys boarding facilities by subscribing that the learners were the problem for failing examinations needs to be cautioned. Therefore, teachers that do not use the AD-A approach, end up blaming learners without actual analysis of other factors that would influence poor grades at national examinations. To this effect, Miller, Gross and Unsworth (2019) argues that the use of a deficit model approach concedes that some learners fail to achieve because they lack the kinds of stuff that teachers should inculcate in their heads. Therefore, the feeling that learners lack what it takes to learn is a serious problem because teachers fail to make an academic diagnosis of the learners. Using the

Anti-deficit model, a teacher normally presents a learner as a learning participant who brings a lot of knowledge and skills into the lessons. Further argument from Miller et al. (2019) seems to suggest that the deficit model appears to bring in issues of negative labeling of girls in terms of their academic achievements. Just like a good class makes every learner in that class better, a good school needs to make every learner good too. The recommended areas of research would be beneficial to both teachers and policymakers in that without a carefully designed plan when teaching learners of a mixed -gender class, educators may feel overwhelmed by the complexities of teaching such girls among boys. It can be argued that some teachers too may attribute poorer academic outcomes to some girls learning from boys boarding facilities secondary schools without first considering how the girls might have adapted their teaching to better support these students' needs.

Conclusion

This chapter aims to summarize the outcome of the results and findings of presentations from the mixed method research. Its attempt to give general discussion as well as linking the findings of the pronounced previous and existing studies on girls' academic achievement in boys boarding facilities secondary school in relation to their counterparts in district boarding schools. This chapter also aims to demonstrate that the research questions and hypotheses have been addressed and tested; theoretical ramifications will be discussed; and suggestions and identification of gaps and topics for additional research will be graphically explained.

The contribution to the literature on school choice is twofold. First, the focus is on secondary school section policy as a largely overlooked potential source of

misunderstanding and interpretation about students' capabilities that are selected in second or third tier secondary schools. The selection policy which at first applied quota system of selection now uses merit. The Directorate of Secondary and Distance Education is responsible for managing admissions to secondary education. Places are offered at the National Secondary Schools, of which there are only four, to those with higher computer-generated scores. There are roughly 10 grant-aided secondary schools in addition to these four National Secondary Schools. The next level of PSLCE successful graduates are placed in the boarding and day secondary schools, which represent the second-tier level of about 130 schools. The remainder are selected to about 700 CDSSs, which are community owned and developed in areas where there are no other secondary schools. These CDSSs are funded by the communities with teacher salaries paid by the formal system national payroll. The whole process entails that students have no choice on the type of secondary school to attend. However, this study is mostly focused on school quality effects in the schools the students are selected and relies on data from district boarding schools and boys boarding facilities schools.

However, based on theory, the empirical data gathered in this study, and earlier findings, there are reasons to believe that students selected for national boarding schools and district boarding schools are expected to be more academically advanced than those in non-boarding schools. The policymakers' responses, which asserted that any student admitted to a secondary school on the basis of merit is capable of competing with their peers at the national level and that some students have displayed exceptional achievement while enrolled in second-, third-, and fourth-tier institutions, run counter to this finding. Policymakers' responses strongly imply that schools have an effect on kids'

progress. As was already noted in chapter two, Borkan and Bakis (2016) used data from 184,587 secondary school students to investigate the connection between school type and student academic achievement. They concluded that learners' outcomes are influenced by the sort of school. It was shown that only 18% of the variation in academic achievement was caused by factors within the school, with 84% of the variation being caused by internal factors. This illustrates that the type of school has a relatively bigger impact on student outcomes.

Examining the Academic Performance Difference between the Girls in the School Models

The first objective was to examine the academic performance difference between the girls in the school models. To address this objective one hypothesis was developed, based on a conceptual model to see if there is a relationship between boarding facilities and national examination results. The null hypothesis was that Malawi School Certificate of Education examination pass rate among girls in boys boarding facilities schools is not the same as girls' performance in district boarding schools. The alternative hypothesis was Malawi School Certificate of Education examination pass rate among girls in boys boarding facilities schools is the same as girls in district boarding schools. The results showed p value at 0.000132 which is less than 0.05 indicating that the Malawi School Certificate of Education examination pass rate is statistically significant between district boarding facilities schools and boys boarding facilities schools. Therefore, the null hypothesis was rejected and the alternative hypothesis was accepted.

A similar test was conducted to find out if district boarding school public university selection rate is greater than boys boarding facilities public university selection rate. The

results showed a p value at 0.005471 which is less than 0.05 indicating that public university selection rate is significant. The null hypothesis was rejected and alternative hypothesis was accepted. The conclusion of the findings from research question one is that girls' academic performance in district boarding school is higher than in boys boarding facilities schools and therefore, there is need to address the inequality by providing the girls with boarding facilities.

Explaining Factors Contributing to the Differences in the Achievement of Girls in Boys Boarding Facilities Secondary School

The second objective was to explain factors contributing to the differences in the achievement of girls in boys boarding facilities secondary school. This study was able to identify and explain both militating and mitigating factors by using the anti-deficit achievement framework to investigate girls' academic achievement in schools with boys boarding facilities. According to the anti-deficit achievement framework perspective approaches, academic performance was assumed to be enabled by a number of resources and supports rather than just one (Harper, 2012).

An assessment of Malawi's education educational plans revealed gaps on critical areas that need to strengthen quality secondary education among girls selected in boys boarding facilities school. For instance, there has been consistently lack of a standardized school infrastructure policy to define the minimum requirements and standards for a school in all education policies since independence up to date. In addition, the quality, efficiency and effectiveness not only in boys boarding facilities schools but also in district boarding school failed to improve due to lack of the evidence-informed policy on allocation

of resources in the Ministry because Malawi has never instituted any teaching and learning materials policy to inform allocation of resources from independence up to date.

Due to the above militating factors, eleven students from boys boarding facilities schools preferred to move from the boys boarding facilities schools to either a national secondary school or a district boarding school, but no student from a district boarding school wanted to leave their school. According to the statistics, the majority of female students in boys boarding facilities schools choose boarding schools since travelling from their homes reduces the amount of time they spend interacting with their peers and teachers, which ultimately affects their academic status.

In terms of academic improvements, the students had responded as follows; 78% of the students in district boarding facilities schools responded that their academic performance improved upon joining the school. While, 22% of the students in boys boarding facilities schools responded that their educational performance did not improve. From this, one can understand that academic performance is more effective in district boarding facilities schools than in boys boarding facilities schools. The teachers responded as follows; 58% of the teachers in district boarding facilities schools responded that there was academic performance improvement among the girls upon joining the school. While, 42% of the teachers in boys boarding facilities schools responded that there was no educational performance improvement upon the girls joining the school. From this, it was concluded that there were was a higher percentage among teachers in district boarding facilities schools that indicated girls academic improvement.

The qualitative data that was gathered from the open-ended interviews with policy makers show that there are no special provisions made to girls in boys boarding facilities

schools in relation to girls boarding facilities which also encamps all sanitary provisions. The policy makers alluded to the fact that a good school environment for the girls need to have good sanitary facilities like clean toilets, washing facilities and shower rooms. The state of affairs in boys boarding schools seem to point to the fact that resources gaps are there in almost all Malawian Schools. In this regard one learner lamented that there are minimum resources available in boys boarding facilities school. He further noted the little contribution of money which is called parents' teachers funds by every student but is not enough to provide any kind of meaningful or any special services for girls.

The challenge of girls' infrastructural provision also extended to learning support facilities such as laboratories and girls' hostels. Girl children themselves acknowledge that their poor academic is because of the lack of these facilities. They argued that there are some subjects like Home Economics and Cookery that were not offered at boys boarding facilities due to lack of Home Economics Laboratory.

Along these lines, are the responses from the teachers' believe that, government does not clearly come out on the type of support that is needed for the girls in boys boarding facilities schools. In their opinion, the government needs to invest more in building school structures such as girls boarding facilities in boys boarding facilities schools in support of the girls in their quest for quality secondary school education.

The Third Objective Was To Investigate The Role Played By The Ministry Of Education Science And Technology In Improving The Quality Of Secondary School Education Among Girls In District Boarding Schools

The fact that only two (20%) of the ten female students in the two boys boarding schools who replied to the question about their homes' location said they lived less than

10 kilometers away indicates that Ministry of Education is not responsible for girls boarding facilities. As this was not enough, seven students (70%) came from households more than 20 kilometers away, compared to one student (10%) who came from a home more than 10 kilometers away but less than 20 kilometers. This was the great complaint raised by girls. This implied that more girls were chosen from outside the specified household regions. These are the females who reside in hostels built by the community and in rented houses near the schools. Typically, the hostels built by the communities do not conform to government standard and designs as a result they lack amenities like tap water, good beds and mattresses, and functional lavatories. This unequal infrastructure distribution is re-affirmed by Ministry of Education in the sense that up to date the Ministry has not yet set standard for school infrastructure that outlines the minimal needs and standards for a secondary school. Furthermore, some of the structure in boys boarding facilities schools are subpar and do not even meet the various needs of the boys themselves. Due to this, the girls claim that the boys boarding facilities schools do not run effectively and efficiently, which has a negative impact on girls' academic performance.

The boys boarding facilities schools commonly referred to as 'schools close to home' were meant to serve the local communities at the grass roots level with the concept of school-community partnerships. According to the policy makers, these school-community partnerships give under-resourced schools the human, financial, and material resources they need to run more efficiently. However, learners in boys boarding facilities schools felt that school-community partnerships placed an unreasonable amount of demands on their parents, who are already tasked with caring for their children while they are enrolled in these secondary institutions. Additionally, they believed that the PTA-

sourced contributions from the community were too small for effective school improvement. However, policy makers insisted that the concept of school-community partners need to be encouraged because government alone cannot develop and improve the boys boarding facilities.

Educational innovations span the entire spectrum of education and involve the individual and creative process of structuring the educational experience. When a teacher uses innovative thinking, they demonstrate and realize each student's potential for solving problems in their best possible way. Therefore strategic objective of Malawi's state education strategy must be to improve access to high-quality girls' education that satisfies the objectives of the country's innovative growth, the modern needs of society, and the needs of girls selected in boys boarding facilities schools.

Analysis of the study problem following Malawi's independence showed the need for a factory model of education. However, in this post-independent and multiparty era, innovative models of education are ideal for developing new educational objectives and implementing new innovative approaches which include providing conducive learning conditions for girls' self- personality identification in boys boarding facilities schools. The ultimate objective will be to change the type of activity and thinking style among policymakers, teachers, and students, which should eventually result in a change in how they interact with one another. In order to improve access, increase impact, and ensure that underserved populations, such as girls who are selected in boys boarding facilities schools, are not left behind, it is crucial to make use of technological advancements to encourage innovation across the entire system of education and skill development. However, the challenge that could be there is that the majority of the

funding for public secondary schools in Malawi comes from the government, which typically takes money from general revenue sources and distributes it according to a formula. It is usually said that Malawian secondary schools offer a diversified learning environment because not all schools fall into the same category and their communities are not all similarly wealthy. This explains why the academic, resource, and policy deficiencies identified in this study exist.

These findings suggest that a large number of pupils are ostracized, which hinders their academic success. These results demonstrate that pupils with poor test scores are put in low-level classrooms alongside other students with low test scores. To guarantee that each student can benefit from both the low and high scorers, it is ideal to expect learners to be chosen for schools whose peer achievement reflects average peer achievement. The findings of this study, however, indicate that some secondary schools in Malawi may not see an improvement in exam outcomes as a result of the procedures used to assign pupils to secondary schools.

REFERENCES

- Abawi, K. (2017). *Data collection methods* (questionnaire and interview). Paper presented at: Geneva Workshop 2017. *Training Course in Sexual and Reproductive Health Research*.
- Abere, M. J., & Musau, L. M. (2015). Teachers' Qualification and Students' Academic Performance in Science Mathematics and Technology Subjects in Kenya.

 International Journal of Educational Administration and Policy Studies, 7, 83-89.
- Abon, J. (2020). Comparing Diversity and Inclusion in the Education of North American Countries: A Critical Perspective on the U.S. and Canada, *Journal of Comparative Studies and International Education*, 2(1), https://www.icsie.com
- Abugre, J. B. (2018). "Institutional governance and management systems in Sub-Saharan Africa higher education: developments and challenges in a Ghanaian Research University." *Higher Education*, 75(2), 323–339. https://link.springer.com/journal/
- Acosta, M.N., & Evans, D.K. (2019). Education in Africa: What Are We Learning?, *Journal of African Economies*, 30(1), 13–54. https://doi.org/10.1093/jae/ejaa009
- Adeniran, A., & Ishaku, J., & Akanni, L., (2020). Is Nigeria experiencing a learning crisis:

 Evidence from curriculum-matched learning assessment?. *International Journal of Educational Development*, 77, 10.1016

- Adeniyi, Y. C., & Omigbodun, O. O. (2016). Effect of a classroom-based intervention on the social skills of pupils with intellectual disability in Southwest Nigeria. *Child and adolescent psychiatry and mental health*, 10(1), 29.
- Adesina, O. (2011). School Plant Planning as Correlate of Students' Academic Performance in Southwest Nigeria Secondary Schools. *International Journal of Business Administration*. 2. 10.5430
- Adesua, V., O., & Akomolafe, C. O. (2016). The Impact of Physical Facilities on Students' Level of Motivation and Academic Performance in Senior Secondary Schools in South West Nigeria, *Journal of Education and Practice*, 7(4), www.iiste.org
- Adetunde, A. I., & Asare, B. (2009). Comparative performance of day and boarding students in secondary school certificate mathematics examinations: A Case Study of KasenaNankana and Asuogyaman Districts of Ghana. *Academic Arena*, *1*(4), 73-96.
- Aggleton, P., & Maxwell, C. (2016). Elite Education, *Journal of Research in International Education*, *15*(2), 175-178.
- Ahmed, K. (2018) 'Teaching critical thinking and writing in higher education: an action research project', *TEAN Journal*, *10*(1), pp. 74-84. https://files.eric.ed.gov./
- Aikman, S., Robinson-Pant, A., McGrath, S., Jere, C. M., Cheffy, I., Themelis, S., & Rogers, A. (2016). Challenging deficit discourses in international education and development. *Compare: A Journal of Comparative and International Education*, 46(2), 314–334.

- Aina, J. K., & Olanipekun, S. (2015). A Review of Teachers' Qualifications and Its Implication on Students' Academic Achievement in Nigerian Schools International *Journal of Educational Research and Information Science*, 2015, 2(2), 10-15. https://ssrn.com/abstract=4360994
- Ajufo, B. I. (2019). Barriers to Girl-Child Education in Nigeria: Implication for Counselling, International Journal of Integrated Research in Education (IJRE), 1(1). https://www.researchgate.net/
- Akaranga S.I., & Makau B.K. (2016). Ethical Considerations and their Applications to Research: a Case of the University of Nairobi. *Journal of Educational Policy and Entrepreneurial Research*, *3*(12), 1-9.
- Akay Şahin, M., & Açikalin, M. (2021). Gender Representation in Elementary and Middle School Social Studies Textbooks in Turkey. *Journal of International Women's Studies*, 22(1), 417-445. https://vc.bridgew.edu/jiws/vol22/iss1/25
- Akinci, C., & Saunders, M, (2015). *Using questionnaire surveys to gather data for within organisation HRD research*. In M Saunders & P Tosey (eds), Handbook of Research Methods on HRD. Edward Elgar, Cheltenham, Cheltenham, pp. 217-30.
- Akram, M. (2012). Formal education, skill development and vocationalisation: The missing link. Research on Humanities and Social Sciences, 2(8), 142-148.
- Akyeampong, K., Delprato, M., Mindano, G., Lewin, K., & Chimombo, J. (2018). Efficiency and effectiveness of secondary education in sub-Saharan Africa, EESSA project. The case of Malawi. Mixed method project report. Project Report. University of Sussex

- Al Husaini, Y., Ahmad S., & Nur S. (2023). Factors Affecting Students' Academic Performance: *A review.* 12, 284-294.
- Alimi, O.S., Ehinola, G.B., & Alabi, F.O. (2012). School Types, Facilities and Academic Performance of Students in Senior Secondary Schools in Ondo State, Nigeria.

 International Education Studies, 5, 44-48.
- Alonge, H., & Ekundayo, H. (2012). Strengthening the Roles of Parent Teacher

 Association in Secondary Schools for Better Community Participation in

 Educational Development in Nigeria, *Journal of Educational and Developmental*Psychology 2(2). http://dx.doi.org/10.5539/jedp.v2n2p16
- Alreck, P. L., & Settle, R. B. (1995). *The Survey Research Handbook: Guidelines and Strategies for Conducting a Survey.* IRWIN Professional Publishing.
- Alshiab, M., & Al-Malkawi, Husam-A., & Lahrech, A. (2020). Revisiting the Relationship between Governance Quality and Economic Growth.

 International Journal of Economics and Financial Issues, 10, 54-63.

 10.32479/ijefi.9927
- Ambo, A., Dabi, K.., & Chan, T. C. (2021). Stakeholder's perceptions of political influences on quality management of secondary schools in Ethiopia, *28*(1), 35-53, *Education Planning Winter*. https://files.eric.ed.gov/
- Angrist, N., & H. A. Patrinos (2018). Global Dataset on Education Quality: A Review and Update (2000-2017). *Policy Research Working Paper; No. 8592*. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/
- Ankomah, Y., Koomson, J., Bosu, R., & Oduro, G., (2005) A Review of the Concept of Quality in Education: *Perspectives from Ghana*. http://www.edqual.org/

- Antony, S., & Elangkumaran, P. (2020). An Impact on Teacher Qualifications on Student Achievement in Science: *A Study on the G.C.E (O/L) in Trincomalee District*. https://www.semanticscholar.org/paper/
- Archard, N. (2018). Gender equality and the purposeful education of girls. *In Alliance*, 60, 46-49. agsa.org.au
- Arcidiacono, F., Baucal, A., & Leijen, Ä. (2021). The Dilemma of Inclusive Education: Inclusion for Some or Inclusion for All, *Frontiers in Psychology, 12*.
- Arnarsson, E., Runarsdottir, E., & Smith, R. (2019). The Effects of Gender and Family Wealth on Sexual Abuse of Adolescents. *International Journal of Environmental Research and Public Health*, *16*, 1788.
- Ashraf, M. A., Khan, Muhammad, Chohan, S., Khan, M., Rafiq, W., Farid, Muhammad, Khan, A., & Dawar, A. (2021). Social Media Improves Students' Academic Performance: Exploring the Role of Social Media Adoption in the Open Learning Environment among International Medical Students in China. *Healthcare*, 9. 10.3390/healthcare9101272
- Asikhia, O.A. (2010). Students and teachers' perception of the causes of poor academic performance in Ogun state secondary schools [Nigeria]: Implications for counseling for national development. *European Journal of Social Sciences, 13*. 229-242.
- Asongu, S. A., & Odhiambo, N. M. (2019). Boosting Quality Education with Inclusive Human Development: Empirical Evidence from Sub-Saharan Africa. *Journal of Applied Social Science*, *13*(2), 139–151. https://www.istor.org/

- Atieno, K.B., Omolo, O., & Otara, A. (2020). School environmental factors influencing academic performance in secondary schools, *International Journal of Novel Research in Education and Learning*, 7(3), pp: (35-45), Month: May June 2020. www.noveltyjournals.com
- Atrostic, B., Bates, N., Burt, G., Silberstein, A. (2001). Nonresponse in U.S. government household surveys: Consistent measures, recent trends, and new insights. *Journal of Official Statistics*. 17. 209-226.
- Ayua, G. (2017). Effective teaching strategies. 10.13140/RG.2.2.34147.09765.
- Baafi, R. (2020) School Physical Environment and Student Academic Performance. *Advances in Physical Education, 10*, 121-137. Doi: 10.4236/ape/2020.102012
- Baghdady, A., & Omar, & Zaki, O (2019). Secondary Education Governance in Sub-Saharan Africa. Mastercrad Foundation.
- Bagley, C., Lumby, J., Hamilton, T., P., Roberts, A., &Ward, S., W. (2016). What is "policy" and what is "policy response"? An illustrative study of the implementation of the leadership standards for social justice in Scotland. *Educational Management, Administration and Leadership, 44*(1), 43–56. https://link.springer
- Bajracharya, A., Psaki, S.R., & Sadiq, M. (2019). Child marriage, adolescent pregnancy and school dropout in South Asia, *Report by the Population Council for the United Nations Children's Fund Regional Office for South Asia*, Kathmandu, Nepal,
- Bans-Akutey, A., & Tiimub, B. (2021). *Triangulation in Research*. 3392. 10.20935/AL33922

- Barnett, E. (2021). Towards an alternative approach to the implementation of education policy: A capabilities framework. *Issues in Educational Research*, *31*(2), 387-403. http://www.iier.org.au/iier
- Barret, D. (1998). The Paradox Process: Creative Business Solutions Where You Least Expect to Find Them, AMACOM, New York.
- Barrett, P., Treves, A., Shmis, T., Ambasz, D., & Ustinova, M. (2019). The Impact of School Infrastructure on Learning: A Synthesis of the Evidence. International Development in Focus. © Washington, DC: World Bank. http://hdl.handle.net
- Bashir, S., Lockheed, M., Ninan, E., & Tan, Jee-P. (2018). Facing Forward: Schooling for Learning in Africa. © Washington, DC: World Bank. http://hdl.handle.net
- Beane, J. (1996). On the Shoulders of Giants! The Case for Curriculum Integration, *Middle School Journal*, 28(1), 6-11. DOI: 10.1080
- Becker, G. S., & Nigel T. (1979). "An Equilibrium Theory of the Distribution of Income and Intergenerational Mobility." *Journal of Political Economy 87*(6), 1153–1189.
- Becker, G.S. (1964) Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education (3rd Ed.). University of Chicago Press, Chicago.
- Becker, G.S. (1993) Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education (5th Ed.). (University of Chicago Press, Chicago.
- Becky, L. (2017). "How Boarding Schools Tried to 'Kill the Indian' Through Assimilation."

 History.com, A&E Television Networks, 16 Aug. 2017. www.history.com/news/
- Begley, C., & Tobin, G. (2004). Methodological rigor within a qualitative framework. *Journal of Advanced Nursing, 48*, 388-96. 10.1111/j.1365-2648.2004.03207

- Behaghel, L., Chaisemartin, P., & Marc Gurgand, (2017). Ready for Boarding? The Effects of a Boarding School for Disadvantaged Students, *American Economic Journal: Applied Economics*, 9(1), 140–164. https://doi.org/
- Beins, B. (2009). Research Methods, A tool for life. 2nd edition. Boston, MA. Pearson
- Belay, S., & Melaku, M. (2019). Education quality challenges in Ethiopian secondary education. *Journal of Education, Society, and Behavioral Science, 31*(2), 1-15. https://journaljesbs.com.
- Berg, B. L. (2007). Qualitative Research Methods for the Social Sciences. Pearson.
- Bernal, P. Mittage, N., & Quireshi, J. (2016). Estimating effect of school quality using multiple proxies. *Labour Economics* 39, 1-10. doi.org/10.1016/
- Beytekin, O. F., & Chipala, H. (2015). The Quality Standardization of Teachers in Malawi Government Secondary Schools. *British Journal of Education, Society & Behavioural Science, 11*, 1-9. 10.9734/BJESBS/2015/18207
- Bhardwaj, P. (2019). Types of sampling in research. *Journal of the Practice of Cardiovascular Sciences*, *5*, 157. 10.4103
- Bhatia, S. (2017, March 13). Comparing Theories of Reference-Dependent Choice. *Journal of Experimental Psychology:* Learning, Memory, and Cognition.

 http://dx.doi.org/
- Biemer, P. P., & Lyberg, L. E. (2003). *Introduction to survey quality*, 335. John Wiley & Sons.
- Black, T.R. (1999) Doing Quantitative Research, London, Sage.

- Blair, F. (2018). The Trouble with Human Capital Theory, *Real-World Economics Review*,

 ISSN 1755-9472, World Economics Association, Bristol, *86*,15-32,

 http://bnarchives.yorku.ca/568/
- Blazar, D. (2016). Teacher and Teaching Effects on Students' Academic Performance,

 Attitudes, and Behaviors. *Doctoral dissertation*, Harvard Graduate School of
 Education.
- Blimpo, M. P., & Pugatch, T. (2020). Entrepreneurship Education and Teacher

 Training in Rwanda [Working Paper]. https://riseprogramme.org
- Blimpo, M., Carneiro, P., Jervis, P., & Pugatch, T. (2019). *Improving Access and Quality in Early Childhood Development Programs:* Experimental Evidence from the Gambia (February 13, 2019). World Bank Policy Research Working Paper No. 8737. https://ssrn.com
- Blundell, R., Dearden, L., Meghir, C., & Sianesi, B. (1999). "Human capital investment: the returns from education and training to the individual, the firm and the economy", *Fiscal Studies*, *20*(1). 1-23.
- Bold, T., Filmer, D., Martin, G., Molina, E., Stacy, B., Rockmore, C., Svensson, J., & Wane, W. (2017). Enrollment without Learning: Teacher Effort, Knowledge, and Skill in Primary Schools in Africa. *The Journal of Economic Perspectives*, *31*(4), 185–204. http://www.jstor.org/stable
- Bonney, K. (2015). Case Study Teaching Method Improves Student Performance and Perceptions of Learning Gains. *Journal of microbiology & biology education.* 16, 21-8. 10.1128/jmbe.v16i1.846

- Börkan, B., & Bakış, O. (2016). Determinants of academic achievement of middle schoolers in Turkey. Educational Sciences: *Theory & Practice, 16*, 2193–2217
- Bouzid, H. (2019). Gender issues in select Moroccan ELT textbooks. Research in English

 Language Pedagogy, 7, 209- 231. 10.30486/relp.2019.665890
- Brante, E., & Strømsø, H. (2018). Sourcing in Text Comprehension: a Review of Interventions Targeting Sourcing Skills. *Educational Psychology Review,* 30. 10.1007/s10648-017-9421-7
- Browner, W. S., Cummings, S. R., & Newman, T. B. (1988). Getting ready to estimate sample size: hypotheses and underlying principles. *Designing clinical research*, *2*, 51-63. https://oaji.net/articles/2021/8593-1615826931.pdf
- Brudevold-Newman, A. (2019). The Impacts of Free Secondary Education:

 Evidence from Kenya [Working Paper]. https://drive.google.com/file
- Bruton, A., & Robles-Piña, R. A. (2009). Deficit thinking and Hispanic student achievement: Scientific information resources. *Problems of Education in the 21st Century, 15,* 41–48. http://www.scientiasocialis
- Bryman, A. (2008). *Social research methods*. 3rd Edition, Oxford University Press., New York.
- Bryman, A., & Emma, B. (2007). *Business Research Methods*, Second Edition.

 Oxford University Press.
- Burchett, H. E., Mayhew, S. H., Lavis, J. N., & Dobrow, M. J. (2013). When can research from one setting be useful in another? Understanding perceptions of the applicability and transferability of research. *Health promotion international*, *28*(3), 418–430. https://doi.org/10.1093/heapro/das026

- Burton, R. M., & Obel, B. (2011). Computational Modeling for What-Is, What-Might-Be, and What-Should-Be Studies—And Triangulation. *Organization Science*, *22*(5), 1195–1202. http://www.jstor.org/stable/41303112
- Cagatay, N. (1998). *Gender and Poverty*. New York: United Nations Development Program, Social Development and Poverty Elimination Division, Working Paper 5.
- Caldwell LL, Xie, H, Wegner L., Smith E.A., & Weybright EH, (2017). Predicting secondary school dropout among South African adolescents: A survival analysis approach. *South African Journal of Education*, 37(2), 1353. https://doi.org
- Cansız, M., Özbaylanlı, B., & Çolakoğlu, M. H. (2018). Impact of school type on student academic achievement= Okul türünün öğrenci başarısı üzerindeki etkisi.
- Cardinal, L., Turner, S., & Burton, R. (2015). Research Design for Mixed Methods: A Triangulation-based Framework and Roadmap.

 Organizational Research Methods.
- Carpenter, D., & Streubert, H. (1999). Qualitative Research in Nursing: *Advancing the Humanistic Perspective* (2nd ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- Carrión, F., Imbusch, P., & Misse, M. (2011). Violence Research in Latin America and the Caribbean, *International Journal of Conflict and Violence*, *5* (1), 87 154.
- Caruana, E., Roman, M., Hernández-Sánchez, J., & Solli, P. (2015). Longitudinal studies. *Journal of thoracic disease*, 7, E537-40. 10.3978
- Casian, M., Mugo, L., & Claire, M., M. (2021). Impact of Teacher' Qualification on Students' Academic Performance in Public Secondary Schools in Rwanda. *Journal of Education, 4*(2), 75-88. https://stratfordjournals.org

- Center for Public Education (2016). Educational Equity: What Does it Mean? How Do We

 Know When We Reach It? http://www.centerforpubliceducation.org
- Chambers, T. T. V., & Spikes, D. D. (2016). "Tracking [Is] for Black People": A Structural Critique of Deficit Perspectives of Achievement Disparities. *The Journal of Educational Foundations*, 29(1-4), 29–53.
- Chen, W., Liu, J., Xu, X., & Zhang, S. (2021). Review of Single Sex Schools, *Advances*in Social Sciences, Education and Humanity Research, 586, 595-601.

 http://creativecommons.org/licenses/by-nc/
- Chibambo, B (2018). Chiefs' narratives of girls and their education in Malawi. Master's thesis, Northern Arizona University. https://openknowledge.nau.e
- Chikhungu, L., Kadzamira, E., Chiwaula, L., & Meke, E. (2020). Tackling girls dropping out of school in Malawi: Is improving household socio-economic status the solution? *International Journal of Educational Research*, 103, 101578.
- Child, B. J. (2018). The Boarding School as Metaphor. *Journal of American Indian Education*, *57*(1), 37–57. https://doi.org/10.5749/jamerindieduc.57.1.0037
- Chinyama, J., Chipungu, J., Rudd, C., Mwale, M., Verstraete, L., Sikamo, C., Mutale, W., Chilengi, R., & Sharma, A. (2019) Menstrual hygiene management in rural schools of Zambia: a descriptive study of knowledge, experiences, and challenges faced by schoolgirls, *BMC Public Health*, 19, 16. https://doi.org/10.1186/12889-018-6360-2
- Chirwa, G., & Naidoo, D. (2014). Curriculum Change and Development in Malawi: A Historical Overview. *Mediterranean journal of social sciences, 5*, 336-336.

- Chohan, Z., & Langa, M. (2011). Teenage mothers talk about their experience of teenage motherhood. *Agenda: Empowering Women for Gender Equity*, *25*(3 (89), 87–95. http://www.jstor.org/stable/41321442
- Chun Tie, Y., Birks, M., & Francis, K. (2019). Grounded theory research: A design framework for novice researchers. *SAGE open medicine*, 7.
- Coerver, F.C, Krutka, D.G., Houser, N.O., Roberts, R.P., & Pennington, K., (2017). Navigating the Reform–Accountability Culture in Oklahoma Social Studies, *Theory & Research in Social Education*, *45*(1), 7-42. DOI: 10.1080/00933104.2016.1213213
- Cohen, L., & Manion, L. (1994). *Educational Research Methodology*. Metaichmio, Athens.
- Cohen, L., Manion, L. & Morrison, K. (2011). Research Methods in Education (7th ed).

 London: Routledge.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research Methods in Education* (8th ed.). London: Routledge. https://doi.org/10.4324
- Cohen, L., Manion, L., & Morrison, K. (2000). Research Methods in Education. http://lst-iiep.iiep-unesco.org/cgi-bin/wwwi32.exe/[in=epidoc1.in].
- Coleman, P. (2022). Special Article Validity and Reliability within Qualitative Research in the Caring Sciences. 14, 2041-2045. https://www.researchgate.net
- Condie, S., Lefgren, L., & Sims, D. (2014). Teacher heterogeneity, value-added and education policy. *Economics of Education Review*, *40*, 76-92.
- Cook, A., & Glass, C. (2016). Women and Top Leadership Positions: Towards an Institutional Analysis. https://doi.org/10.1111/gwao.12018

- Cope, D. (2014). Methods and Meanings: Credibility and Trustworthiness of Qualitative Research. *Oncology nursing forum*, *41*, 89-91.
- Corbin, J., & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (4th ed.). Thousand Oaks, CA: Sage.
- Cornford, T., & Smithson, S. (2006). *Project research in information systems: a student's guide.*
- Crampton, F. E., & Thompson, D. C. (2001). Introduction to the Special Issue: The Crisis in School Infrastructure Funding. *Journal of Education Finance*, *27*(2), 625–631. http://www.istor.org/stable/20764023
- Creswell, J. W. (2009). Research Design Qualitative, Quantitative and Mixed Methods

 Approach (3rd ed). London: SAGE Publication.
- Creswell, J. W. (2013). Qualitative inquiry and research design: Choosing among five approaches (3rd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W., (2014). Research design: qualitative, quantitative, and mixed methods approaches (4th ed.). SAGE Publications Inc, United Kingdom.
- Creswell, J., & Plano Clark, V. (2007). *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: Sage.
- Creswell, J.W, Plano Clark, V., Gutmann, M., & Hanson, W (2003). Advanced mixed methods research designs. In A. Tashakkori and C Teddle (Eds.), *Handbook of mixed methods in social and behavioral research* (pp. 209-240). Thousand Oaks, CA: Sage.

- Creswell, J.W. (2003). Research Design: Qualitative, Quantitative, and Mixed Method Approaches. Sage Publications, Thousand Oaks.
- Creswell, J.W., & Poth, C.N. (2018). *Qualitative Inquiry and Research Design*Choosing among Five Approaches. 4th Edition, SAGE Publications, Inc.,

 Thousand Oaks.
- Cronholm, S., & Hjalmarsson, A. (2011). Experiences from Sequential Use of Mixed Methods. *The Electronic Journal of Business Research Methods*, *9*, 87-95. https://www.semanticscholar.org/pape
- Cuesta, A., Glewwe, P., & Krause, B. (2016). School Infrastructure and Educational Outcomes: A Literature Review, with Special Reference to Latin America. *Economía* 17(1), 95-130. doi:10.1353/eco.2016
- Dagne, G., & Beshir, E. (2019). Determinants that affect students' motivation in Physical education learning in Sandafa Woreda High Schools, Ethiopia. *International Journal of Humanities and Social Science*, *24*(6), 70-77. https://www.ijhssnet.com
- Damah, K.A., & Otchere, F. (2020). *Policy Options to improve the educational impact of the Malawi Social Cash Transfer Program.* Final Report 2020.
- Davis, L., & Museus, S. (2019). What Is Deficit Thinking? *An Analysis of Conceptualizations of Deficit Thinking and Implications for Scholarly Research. NCID Currents, 1*, 10.3998/currents.17387731.0001.110.
- De Vaus, D. A. (1995). Surveys in Social Research. Sydney: Allen & Unwin.

- Dean, M. & Hintz, E. A. (2020). Best practices for returning research findings to participants: Methodological and ethical considerations for communication researchers. *Communication Methods and Measures, 14*(1), 38-54.
- Dee, T. S. (2007). Teachers and the gender gaps in student achievement. *Journal of Human Resources*, 42(3), 528–554.
- Deku, P., & Vanderpuye, I. (2017). Perspectives of teachers regarding inclusive education in Ghana. *International Journal of Whole Schooling*, 13(3), 39-54.
- Denzin, N.K. (1978). The research act: A theoretical introduction to sociological methods (2nd ed.). New York: McGraw Hill.
- Deshpande, T., & Gharai, S, Patil, S., Patil, S.R., & Durgawale, P.M. (2018).

 Menstrual hygiene among adolescent girls A study from urban slum area.

 Journal of Family Medicine and Primary Care, 7, 1439. 10.4103
- Devi, L. L. (2017). Political instability and its influence on higher education: A study of students' perception at Manipur University. *International Journal of Humanities and Social Science Studies*, *3*(5), 300-307. https://www.ijhssnet.com
- Dewi, S. S., & Sudira, P. (2018). The contribution of teaching factory program implementation on work readiness of vocational high school students in Makassar.

 Journal of Educational Science and Technology (EST), 4(2), 126–131.

 https://doi.org/10.26858/est.v4i2.6434
- Dhungana, K. (2020). Paradoxes of Quality Education in south Asia, Corridors of Knowledge for Peace and Development, Sustainable Development Policy Institute. https://www.jostor.com/stable/respec24374.22

- Dimo, D. (2017). Factors that affect community participation in the implementation of a school improvement program in primary schools of Damot Woide District, Wolaita Zone. *International Journal of Advanced Research*, *5*(10), 1589-1599.
- Dimo, D., Tekaligne, M., & Wubayehu, D. (2017). Factors that affect instructional leadership role in improving students' academic achievement in secondary schools of Illubabora Zone. *International Journal of Advanced Research*, *5*(10), 1576-1588.
- Diwangkoro, E., & Soenarto, (2020). Development of teaching factory learning models in vocational schools. *Journal of Physics: Conference Series, 1456.* 012046. 10.1088/1742-6596/1456/1/012046
- Doepke, M., & Kindermann, F., (2019). "Bargaining over Babies: Theory, Evidence, and Policy Implications." *American Economic Review*, *109*(9), 3264-3306.DOI: 10.1257/aer.20160328
- Dooly, M., & Moore, E., & Vallejo, C. (2017). Research ethics.
- Dubois, A., & Gadde, L. (2011) Systematic combining: an abductive approach to case research. *Journal of Business Research 55*(7), 553–560. https://www.sciencedirect, com>issues
- Duchon, D., & Kaplan, B. (1988). Combining Qualitative and Quantitative Methods in Information Systems Research: A Case Study. *MIS Quarterly*, *12*. 571-586.
- Duflo, A., Kiessel, J, & Lucas, A. (2020). Experimental evidence on alternative policies to increase learning at scale *Working Paper 27298*. http://www.nber.org/papers

- Dumont, H., & Istance, D. (2010). Analyzing and designing learning environments for the 21st century. The Nature of Learning: *Using Research to Inspire Practice*, 19-34. 10.1787/9789264086487-3-en
- Dustmann, C., Hyejin, K., & Kwak, Do. (2018). Why Are Single-Sex Schools Successful? *Labour Economics*. Retrieved from 54, 10.1016/j.labeco.2018.06.005
- Easton, G. (2010). Critical Realism in Case Study Research. Industrial Marketing and Management, 39, 118-128. https://doi.org/10.1016/j.indmarman
- Echazarra, A., & Radinger, T. (2019). Learning in rural schools: Insights from PISA,

 TALIS and the literature (OECD Education Working Papers, No. 196). Paris,

 France: OECD Publishing. https://doi.org/10.1787/8b1a5cb9-en
- Ede'o, A.Z., Ketebo, J.H., & Chala, B.W., (2020). "Feminization of multidimensional urban poverty in Sub-Saharan Africa: Evidence from selected countries," *African Development Review, African Development Bank, 32(4), 632-644.*
- Eder, J., & Reyhner, J. (2017). *American Indian education*: A history (revised edition.). Norman, OK: University of Oklahoma.
- Ehala, M. (2020). Tulevik on erikoolide päralt. [Future is for special schools]. *Postimees*. https://leht.postimees.ee/6901395/tulevik-on-erikoolide-paralt
- Elnour, H., & Saad, S. (2020). Inclusive Education: A case study on its challenges and long-term impact on visually impaired individuals. *International Journal of Modern Education*, 2, 30-42. 10.35631/IJMOE

- EMIS. (2018). Education Management Information System 2018 Report. (Govt. of. Malawi, Edu). http://www.csecmw.org/EMIS-2018-REPORT-FINAL.pdf
- EMIS. (2019). Education Management Information system, (Govt. of Malawi, Educ.)
- Etikan, I. (2016). Comparison of Convenience Sampling and Purposive Sampling.

 American Journal of Theoretical and Applied Statistics, 5(1), 10.11648
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5, 1-4. https://doi.org/10.11648/j.aitas.
- Eurofound (2018). Women in management: Underrepresented and overstretched?

 Publication Office of the European Union, Luxembourg.
- Evans, D. K., & Yuan, F. (2019). What We Learn about Girls' Education from Interventions that Do Not Focus on Girls *World Bank Policy Research Working Paper No. 8944*. https://ssrn.com/abstract=3430559
- Ewetan, T.O., & Ewetan, O.O. (2015). Teachers' teaching experience and academic performance in Mathematics and English Language in public secondary schools in Ogun State, Nigeria. *International Journal of Humanities, Social Sciences and Education, 2* (2), 123-134.
- Ezike, B. (2018). Classroom environment and academic interest as correlates of achievement in senior secondary school chemistry in Ibadan south West local government area, Oyo state, *Nigeria. Global Journal of Educational Research*, 17, 61. 10.4314/gjedr.v17i1.9
- Fairhurst, G. T., & Connaughton, S. L. (2014). Leadership: A communicative perspective. *Leadership*, *10*(1), 7-35.

- Fan, G., & Popkeewit, T.S. (2020). Handbook of Education Policy Studies, School/University, *Curriculum and Assessment*, 2.
- Fanaye, C., Dagne, G., K., & Beshir, K., (2019). Determinants That Affect Student Motivation in Physical Education Learning In Sandafa Woreda High Schools, Oromiya Ethiopia. *International Journal of Humanities and Social Science*, 24. 70-77. 10.9790/0837-2406097077
- Feir, D. L. (2016). The long-term effects of forcible assimilation policy: The case of Indian boarding schools. *The Canadian Journal of Economics / Revue Canadienne d'Economique*, 49(2), 433–480. http://www.istor.org/stable
- Ferguson, H., Bovaird, S., & Mueller, M. (2007). The impact of poverty on educational outcomes for children. *Padiatrics & child health*, *12*(8), 701–706. https://doi.org/
- Ferrance, E. (2000). *Themes in education: Action research*. Brown University: Educational Alliance, 1-34.
- Firdausy, A. R., Setyaningsih, N., & Waluyo, M. (2019). The Contribution of Student Activity and Learning Facilities to Learning Independency and its Impact on Mathematics Learning Outcomes in Junior High School. Indonesian, *Journal on Learning and Advanced Education* (IJOLAE), 1(2), 29-37.
- Fisa, R., Musukuma, M., Sampa, M., Musonda, P., & Young, T. (2022). Effects of interventions for preventing road traffic crashes: an overview of systematic reviews. *BMC public health*, 22(1), 513. https://doi.org/10.1186
- Fitzsimmons, T.W., Yates, M. S., & Callan, V. (2018). Hands Up for Gender Equality: A Major Study into Confidence and Career Intentions of

- Adolescent Girls and Boys. Brisbane, Qld: AIBE Centre for Gender Equality in the Workplace The University of Queensland.
- Foluke, O. A., & Hyacinth, I. N. (2017). Insurgency and the Shrinking Space for Young Girl Education in the North-East, Nigeria. *European Scientific Journal, ESJ*, 13(31), 114. https://doi.org/10.19044/esj.2017.v13n31p114
- Fouka, G., & Mantzorou, M. (2011). What are the major ethical issues in conducting research? Is there a conflict between the research ethics and the nature of nursing? *Health Science Journal*, *5*(1), 3-14.
- Fourie, J. (2016). "The rise of education in Africa", *The History of African Development*.

 https://www.aehnetwork.org/wp-content/uploads-
- Fraser, J., Fahlman, M., Arscott, J., & Guillot, I. (2018). Pilot Testing for Feasibility in a Study of Student Retention and Attrition in Online Undergraduate Programs. *The International Review of Research in Open and Distributed Learning*, 19, 10.19173
- Fusch, P., & Ness, L. (2015). Are We There Yet? Data Saturation in Qualitative Research. *Qualitative Report*, 20, 1408-1416. 10.46743/2160-3715/2015.2281
- Gaddis, I., Lahoti, R., & Swaminathan, H. (2022). Women's Legal Rights and Gender Gaps in Property Ownership in Developing Countries, Population and Development Review, 48, (2), 331-377. https://econpapers.repec.org
- Gaillet, L.L., & Guglielmo, L. (2014). The Role of the Researcher. In: Scholarly Publication in a Changing Academic Landscape: *Models for Success.* Palgrave Macmillan, New York. https://doi.org/10.1057/9781137410764_5

- Gajda, A., Karwowski, M., & Beghetto, R. (2017). Creativity and Academic Achievement:

 A Meta-Analysis. *Journal of Educational Psychology, 109*, 269-299.

 https://doi.org/10.1037/edu0000133
- Gajigo, O. (2014). "Closing the Education Gender Gap: Estimating the Impact of Girls' Scholarship Program in the Gambia." *Education Economics*, 1–22. https://openknowledge.worldbank.org/server/api/core/bitstreams
- George, L., & Spencer, J. (2016). Single sex vs. co-educational high schools:

 *Performance of Caribbean students across school types in mathematics on the Caribbean Secondary Education Certificate, 6, 96-121.
- Giertz, K. (2016). *Quality education*: The case of teacher motivation and attrition in Ethiopia. Linneun universitetet Master's Thesis. https://www.diva-portal.org/smash/qet/diva2
- Glanz, J. (2016). "Action Research by Practitioners: A Case Study of a High School's Attempt to Create Transformational Change," *Journal of Practitioner Research*, 1(1), Article 3. http://doi.org/10.5038/2379-9951.1.1.1027
- Glass, C., & Cook, A. (2016). Leading at the top: Understanding women's challenges above the glass ceiling. *The Leadership Quarterly*, 27(1), 51–63. https://doi.org/10.1016/j.leaqua.2015.09.003
- Göksoy, S. (2017). The infrastructure adequacy of schools within the scope of equality in education. *International Journal of Leadership Education*.
- Goldin, C. (2016). "Human Capital." In Handbook of Cliometrica, ed. Claude Diebolt and Michael Haupert, 55-86. Heidelberg, Germany: Springer Verlag.

- Grant, C. (2017). *The Contribution of Education to Economic Growth*. K4D Helpdesk Report. Institute of Development Studies.
- Grant, C., & Sleeter, C. (1994). *Making choices for multicultural education: Five approaches to race, class, and gender.* Englewood Cliffs, NJ: Prentice Hall.
- Grazia, V., & Molinari, L. (2021). School climate multidimensionality and measurement: A systematic literature review. Research Papers in Education, 36(5), 561-587.
- Gregg, M. T., (2018). "The long-term effects of American Indian boarding schools," *Journal of Development Economics,* Elsevier, *130*(C), 17-32. DOI: 10.1016/j.jdeveco.2017.09.003
- Grover, V. (2015). Research Approach: An overview. *Golden Research Thoughts, 4,* 1-8. https://www.researchgate.net/publication/273352276
- Guan, L. (2019) Research on the Contribution of Female Human Capital in Economic Growth in Guangdong Province. *Modern Economy*, *10*, 1271-1291. Doi: 10.4236/me.2019.104087
- Guba, E. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries.

 Educational Technology Research and Development, 29(2), 75-91.
- Gutura P., & Manomano, T. (2018). Feminization of Poverty among Girl Children:

 Towards Social Transformation, *Journal of Conflict and Social Transformation*,

 7(1), 81-97. https://repository.up.ac.za

- Hahn, Y., & Wang, L.C. (2019). "The Effectiveness of Single-Sex Schools through out-of-School Activities: Evidence from South Korea." *Oxford Bulletin of Economics and Statistics*, 81(2), 369–393. Doi:10.1111/obes.12266
- Hammer, C. (2011). The Importance of Participant Demographics. American journal of speech-language pathology / American Speech-Language-Hearing Association. 20. 261. Doi: 10.1044/1058-0360(2011/ed-04)
- Handoyo. (2020). UNESCO. Wabah virus corona ancam pendidikan 300 juta siswa.

 Kontan.Co.Id. https://internasional.kontan.co.id/news/unesco-wabah-virus-corona-ancam-pendidikan-300-juta-siswa
- Harper, S. R. (2012). Black male student success in higher education: A report from the National Black Male College Achievement Study. Philadelphia: University of Pennsylvania, *Center for the Study of Race and Equity in Education*.
- Hatch, J.A. (2002). *Doing Qualitative Research in Education Settings*. Suny Press, New York.
- Haug, P., (2017). Understanding inclusive education: ideals and reality, Scandinavian Journal of Disability Research, 19(3), 206-217. DOI: 10.1080/
- Hawrot, A., & Koniewski., M. (2021). Are single-sex schools more effective than the coed ones? The effect of single-sex schooling on achievement among female adolescents in Catholic schools, *Research Papers in Education*. https://doi.org/10.1080/02671522.2021.1886318

- Heath, R., & Jayachandran, S. (2016). "The Causes and Consequences of Increased Female Education and Labor Force Participation in Developing Countries," NBER WorkingPapers 22766, National Bureau of Economic Research, Inc
- Heavin, T. (2018). "A Mixed-Method Study of Kindergarten through Third-Grade

 Teachers' Perceptions of Homework" (2018). *Dissertations.* 142.

 https://digitalcommons.lindenwood.edu/dissertations/142
- Hendrayana, A., Mutaqin, A., & Syamsuri, S. (2019). The Phenomenon of Boarding School and Its Mathematics Learning. Al-Jabar: *Jurnal Pendidikan Matematika*, 10(1), 159-175. https://moraref.kemenag.go.id/archives/journal
- Hensen, K. T. (1996). *Teachers as researchers*. In J. Sikula (Ed.), Handbook of research on teacher education (4th ed. pp. 53-66). New York: Macmillan.
- Hill, M. A., & King, E. (1995). Women's education and economic well-being, *Feminist Economics*, 1(2), 21-46.
- Hill, R. (1998). What sample size is "enough" in internet survey research? Interpersonal Computing and Technology: *An Electronic Journal for the 21st Century*, *6*, 3-4. http://www.emoderators.com/ipct-i/1998/n3-4/hill.html
- Hong Nguyen, Chi (2007) "Email Surveys in Educational Research: Ethical Surveys in Educational Research," *Essays in Education*, *21*(1), Article 2. https://openriver.winona.edu/eie
- Hong, G., Park, G., Sim, S., & Kim, S. (2019). Female *Education Externality and Inclusive*Growth at SSRN. https://ssrn.com/abstract

- Howard, W. A. (2016). *Adjusting* to *boarding* in an *international boarding school*:

 A grounded theory research study. Doctoral dissertation: Nipissing.

 https://repository.library.northeastern.edu/files/neu:4f190x37m/fulltext

 https://doi.org/10.1080/23312521.2016.1152942
- Hughes, A. (1993). *Backwash and TOEFL 2000*. Unpublished manuscript.

 University of Reading, England.
- Hussein, A., Muturi, W. & Samantar, M. (2018). The Influence of the Community Involvement on Academic Performance of Secondary Schools: Case of Garowe District, 5(8), 23.
- Hwang, N. Y., & Fitzpatrick (2021). Student–Teacher Gender Matching and Academic Achievement, 7(1), 1–1. https://iournals.sagepub.com/home/ero
- Hwang, N., & Kisida, B. (2021). Spread Too Thin: The Effects of Teacher Specialization on Student Achievement. (EdWorkingPaper: 21-477). Retrieved from Annenberg Institute at Brown University. https://-doi.org/10.26300/616s-he51
- Ileka, G., & Massomeh, H. (2021). THE COVID-19 Pandemic Impact on Global Economy.
- Ingutia, R., Rezitis, A., & Sumelius, J. (2020). Child Poverty, Status of Rural Women and Education in Sub Saharan Africa. *Children and Youth Services Review.* 111, DOI: 104869. 10.1016
- Jackman, W., M., Morrain-Webb, J.', & Fuller, C (Reviewing editor) (2019) Exploring gender differences in achievement through student voice: Critical insights and analyses, *Cogent Education*, *6*(1),

- Jackson, C. K. 2016. "The Effect of Single-Sex Education on Test Scores, School Completion, Arrests, and Teen Motherhood: Evidence from School Transitions."

 Working Paper 22222. RESEARCH PAPERS IN EDUCATION 19 NEBER Working

 Paper Series. Cambridge, MA: National Bureau of Economic Research.

 https://www.nber.org/papers/w22222.pdf
- Jacob, A., Sunday, Olanipekun, S., & Garuba, A. (2015). Teachers' Effectiveness and its Influence on Students' Learning. Advances in Social Sciences Research Journal, 2. 10.14738/assrj.24.1082
- Janghorban, R., Roudsari, R.L., & Taghipour, A. (2014). Skype interviewing: The new generation of online synchronous interview in qualitative research. International journal of qualitative studies on health and well- being, 9 1, 24152.
- Jefferson, F., & Paul, J. (2019). A Comparative Analysis of Student Performance in an Online vs. Face-to-Face Environmental Science Course from 2009-2016. *Frontiers in Computer Science*, 12. https://doi.org/10.3389/fcomp
- Jill, F. (2016). Human capital theory as a development theory and the state of education in Malawi: A systematic review of theory and literature in the context of Malawian.pdf. https://www.academia.edu/28431489
- Johnson, R. & Christensen, Larry. (2014). *Educational Research Quantitative, Qualitative, and Mixed Approaches* (5th ed.).
- Johnson, R.B. & Onwuegbuzie, A.J. (2004) Mixed Methods Research: A Research

 Paradigm Whose Time Has Come. *Educational Researcher*, 33, 14-26.

 http://dx.doi.org/10.3102/0013189X033007014

- Joshua, K., & Zacharia, K. (2016). Conflict and Trade-offs Between Efficiency and Access: A Case of Day and Boarding Secondary Schools in Kenya Kosgei, *Journal of Education and Practice*, 7(26). www.iiste.org
- Kachur, C. A. (2017). The freedom and privacy of an Indian boarding school's sports field and student athletes' resistance to assimilation, A Thesis Submitted to the Graduate College of Bowling Green State University.
- Kadzamira, E., & Rose, P. (2001) 'Educational Policy Choice and Policy Practice in Malawi: Dilemmas and Disjunctures', IDS Working Paper no. 124, Institute of Development Studies, Brighton.
- Kaffenberger, M., & Pritchett, L. (2021). Effective Investment in Women's Futures: Schooling with Learning. *International Journal of Educational Development*, *86*, 102464, ISSN 0738-0593. https://doi.org/10.1016/j.ijedudev.2021.102464
- Kalipeni, E., & Kaphagawani, N. C. (2017). Sociocultural factors contributing to teenage pregnancy in Zomba district, Malawi. *Global public health*, 12(6), 694–710. https://doi.org/10.1080/17441692.2016.1229354
- Kapoor, M. C. (2016). Types of studies and research design. *Indian journal of anaesthesia*, 60(9), 626–630. https://doi.org/10.4103/0019-5049.190616
- Kart, A., & Kart, M. (2021). Academic and Social Effects of Inclusion on Students without

 Disabilities: A Review of the Literature. *Education. Sciences, 11*, 16. https://doi.org/10.3390/educsci11010016
- Karunanayake, D., Aysha, M., & Umesha. N.D., (2021). The Psychological Well-Being of Single Mothers with School age Children: An Exploratory Study. *International*

- Journal of Scientific Research in Science and Technology, 8, 16-37. 10.32628/IJSRST21812
- Kaufmann, K.M. (2017). Gender Peer Effects, No cognitive Skills and Marriage

 Market Outcomes: Evidence from Single-Sex Schools in the UK.
- Kaur, R., Bhallla, Manoj Kumar, Prasanthi R., & Surjit. S. (2015). "Sex Ratio Imbalances and Marriage Squeeze in India: 2000-2050." New Delhi: UNFPA.
- Khoiron, A. (2016). "The Influence of Teaching Factory Learning Model Implementation

 To The Students' Occupational Readiness," *J. Pendidik. Teknol. dan Kejuru.*, 23

 (2), 122–129. https://doi.org/10.21831/jptk.v23i2.12294
- Kim Y., & Kawachi, I. (2016) School- and Individual-level Predictors of Weight Status

 Misperception among Korean Adolescents: *A National Online Survey. PLoS ONE*11(5): e0154826. https://doi.org/10.1371/journal.pone.0154826
- Kingsley, I., & N. Omoregie, N. (2020). The Influence of Teachers Qualifications on Academic Performance of Secondary School Students in Delta State, *African Scholars Journal of Contemporary Education Research (JCER-8)*, 19(8).
- Koller, D., Le Pouesard, M., & Rummens, J. (2018). "Defining social inclusion for children with disabilities: A critical literature review." *Children & Society*, 32(1), 1-13. doi: 10.1111/chso.12223
- Koniewski, M., & Hawrot, A. (2021). Are single-sex schools more effective than the coed ones? The effect of single-sex schooling on achievement among female adolescents in Catholic schools. Research Papers in Education. 10.1080/02671522.2021.1886318.
- Kumar, P.A., & Singh, B. (2021). Inclusive education.

- Kumari, M., & Rashid, R. (2016). Need and Importance of Female Education". *American Research. Journal of Humanities and Social Science, Volume 2016,* 1- 4 pages DOI: 10.21694/2378-7031.16013
- Kvale, S. (1996) *Interviews: An Introduction to Qualitative Research Interviews*. Sage Publications, Thousand Oaks Califonia
- Kwaja, M.A., & Verjee, A. (2021). At-Issue- An Epidemic of Kidnapping: Interpreting School Abductions and Insecurity in Nigeria, *African Studies Quarterly*, 20(3). http://www.africa.ufl.edu/asq/v20/v20i3a6.pdf
- Lawrence, S., Arul, N., & Hanitha, T. (2017). A study on teachers' motivational strategy and academic achievement of higher secondary students. *Aarhat Multidisciplinary International Education Research Journal*, *6*, 89-98. https://www.researchgate.net/publication/
- Leijen Ä, Arcidiacono, F., & Baucal, A. (2021). The Dilemma of Inclusive Education:

 Inclusion for Some or Inclusion for All. *Front. Psychol.* 12:633066. doi: 10.3389/fpsyg.2021.633066
- Lewin, Keith. (2009). Access to education in sub-Saharan Africa: Patterns, problems and possibilities. *Comparative Education*. http://lst-iiep.iiep-unesco.org/
- Lim, J., & Meer, J. (2015). The impact of teacher-student gender matches: Random assignment evidence from South Korea. *Journal of Human Resources*, *52*(4), 979–997. https://doi.org/10.3386/w21407
- Limon, M. (2016). The Effect of the Adequacy of School Facilities on Students

 Performance and Achievement in Technology and Livelihood Education.

- International Journal of Academic Research in Progressive Education and Development. 5. 10.6007/IJARPED/v5-i1/2060
- Little. B (2023). Government Boarding Schools Once Separated Native American

 Children From Families. https://www.history.com/news/government-boarding-schools-separated-native-american-children-families
- Lobe, B., Morgan, D., & Hoffman, K. (2020). Qualitative Data Collection in an Era of Social Distancing. *The International Journal of Qualitative Methods*, *19*, <u>10.1177/1609</u>
- Louie, D. (2018). Sexual Exploitation Prevention Education for Indigenous Girls.

 Canadian *Journal of Education*, 41.
- Luz, N. (2013). How Conflict and Displacement Fuel Human Trafficking and Abuse of Vulnerable Groups. The Case of Colombia and Opportunities for Real Action and Innovative Solutions. *Groningen Journal of International Law*, 1(1). 10.21827
- Macdonald, M. A., Gringart, E., Ngarritjan Kessaris, T., Cooper, M., & Gray, J. (2018). A 'better 'education: An examination of the utility of boarding school for Indigenous secondary students in Western Australia. *Australian Journal of Education, 62*(2), 192-216. https://doi.org/10.1177/0004944118776762
- Maddoly, R. (2016). The Impact of High Stakes Testing on the Learning Environment.

 Retrieved from Sophia, The St. Catherine University repository website.

 https://sophia.stake.edu/msw-paper/658
- Magro, M. J., Prybutok, V. R., & Ryan, S. D. (2015). How survey administration can affect response in electronic Surveys. Quality & Quantity: *International Journal of Methodology*, 49(5), 2145-2154. doi:10.1007/s11135-014-0098-4

- Maier, A, Daniel, J., Oakes, J. & Lam, L. (2017). (2017). Community schools as an effective school improvement strategy: *A review of the evidence*. Palo Alto, CA: Learning Policy Institute.
- Malisa, Mark & Missedja, (2019). Schooled for Servitude: The Education of African Children in British Colonies, 1910–1990. *Genealogy*. 3, 40. 10.3390/genealogy
- Malongo, C. N. (2016). Examining factors that influence high dropout rate of female students in secondary schools: a case study of selected secondary schools in nkhata-bay district -Malawi (Master's Thesis, Mzuzu University)
- Manthei, Jr., & Larry P. (2016). "Cutting the Deficit: An Examination of Factors

 Contributing to the Success of Black Males Seeking Doctoral Degrees at a

 Predominantly White Institution". LSU Doctoral Dissertations. 183.

 https://repository.lsu.edu/
- Mapesela, M., & Hlalele, D. & Alexander, G. (2012). Overcoming Adversity: A Holistic Response to Creating Sustainable Rural Learning Ecologies. *Journal of Human Ecology*, 38, 91-103. 10.1080/09709274.2012.11906478
- Marginson, S. (2019): Limitations of human capital theory. *Studies in Higher Education*, *44*(2), 287-301.
- Marques, A., Santos, D. A., Hillman, C.H., & Sardinha, L.B., (2017). How does academic achievement relate to cardiorespiratory fitness, self-reported physical activity and objectively reported physical activity: a systematic review in children and adolescents aged 6-18 years? *Br. J. Sports Med.* doi: 10.1136/bjsports-2016-097361

- Marques, S., Gallagher, M., & Lopez, S. (2017). Hope- and Academic-Related Outcomes:

 A Meta-Analysis. *School Mental Health*, *9*, 1-13. 10.1007/s12310-017-9212-9
- Marshall, C. & Rossman, G.B. (1999) Designing Qualitative Research, SAGE Publications.
- Marszalek, J. M., Barber, C., Kohlhart, J., & Cooper, B. H. (2011). Sample size in psychological research over the past 30 years. *Perceptual and Motor Skills,* 112(2), 331-348.
- Martin, A. J., Papworth, B., Ginns, P., & Liem, G. A. D. (2014). Boarding School,

 Academic Motivation and Engagement, and Psychological Well-Being: A LargeScale Investigation. *American Educational Research Journal*, *51*(5), 1007–1049.

 http://www.istor.org/stable/24546733
- Martínez E., & A. Odhiambo. (2018). Leave no girl behind in Africa: Discrimination in education against pregnant girls and adolescent mothers. New York: Human Rights Watch.
- Masharova, T., Punchyk, V., & Vahrusheva, S. (2020). The Development of Students' Independence in The Conditions of Distance Learning. *SHS Web of Conferences*. 79, 01009. 10.1051/shsconf/20207901009
- Maxwell S, Reynolds KJ, Lee E, Subasic, E., & Bromhead, D. (2017) The Impact of School Climate and School Identification on Academic Achievement: Multilevel Modeling with Student and Teacher Data. *Front. Psychol.* 8:2069. doi: 10.3389/fpsyg.

- Maxwell, C., & Aggleton, P; (2016). Schools, schooling and elite status in English education changing configurations? *L'Année sociologies, 66* (1) pp. 147-170. https://discovery.ucl.ac.uk/id/eprint/1489668
- McAlpine, A., Hossain, M., & Zimmerman, C. (2016). Sex trafficking and sexual exploitation in settings affected by armed conflicts in Africa, Asia and the Middle East: systematic review. *BMC International Health and Human Rights*, 16(1), 34. https://doi.org/10.1186/s12914-016-0107-x
- McArthur, C., Bai, Y., Hewston, P., Giangregorio, L., Straus, S., & Papaioannou, A. (2021). Barriers and facilitators to implementing evidence-based guidelines in long-term care: a qualitative evidence synthesis. *Implementation science*, *IS*, 16(1), 70. https://doi.org/10.1186/s13012-021-01140-0
- McCain, H. (2017). Living with Disability and Chronic Pain Presented by Creating

 Accessible Neighbourhoods: Medical Model of Disability versus Social Model of

 Disability. https://canbc.org/blog/medical-model-of-disability/

 Socialmodel-of-disability/
- McConnell, C., & Mupuwaliywa, M. (2016). Keeping Girls in School: Situation Analysis for Malawi. *Country Policy Brief.* © World Bank, Washington, DC.
- McKay, J., & Devlin, M. (2016). "Low income doesn't mean stupid and destined for failure": Challenging the deficit discourse around students from low SES backgrounds in higher education. *International Journal of Inclusive Education*, 20(4), 347–363
- McKinley, Ni. (2011). Feminist Consciousness and Objectified Body Consciousness.

 *Psychology of Women Quarterly, 35, 684-688. 10.1177/0361684311428137.

- McLeod, S.A. (2019).Sampling methods. Simply Psychology. https://www.simplypsychology.org/sa
- Melnikas, A. J., Mulauzi, N., Mkandawire, J., & Amin, S. (2021). Perceptions of minimum age at marriage laws and their enforcement: qualitative evidence from Malawi. BMC public health, 21(1), 1350. https://doi.org/10.1186/s12889-021- 11434-z
- Meredith, J. (1998). Building operations management theory through case and field research. *Journal of Operations Management*, *16*, 441–454.
- Merriam, S. B. (1998). Qualitative Research and Case Study Applications in Education.

 Revised and Expanded from "Case Study Research in Education": ERIC
- Merriam, S. B., & Tisdell, E. J. (2016). Qualitative Research: *A Guide to Design and Implementation* (4th Ed.). San Francisco, CA: Jossey Bass.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative Research: A Guide to Design and Implementation (4th ed.).* San Francisco, CA: Jossey Bass.
- Mertler, C. C., & Charles, C. M. (2008). Introduction to Educational Research (7th ed.). Boston, MA: Pearson.
- Mgomezulu, Victor. (2014). The crisis in public education in Malawi. *International Journal of Advanced Research*. 2. 323-331.
- Ministry of Education Science and Technology (2016). *Malawi Education sector Analysis*, Lilongwe, Malawi.
- Ministry of Education Science and Technology (2017). *Malawi Education sector Analysis*, Lilongwe, Malawi.

- Ministry of Education Science and Technology (2018). *Malawi Education sector Analysis*, Lilongwe, Malawi.
- Ministry of Education Science and Technology (2019). *Malawi Education sector Analysis,*Lilongwe, Malawi.
- Ministry of Education Science and Technology (2020). *Malawi Education sector Analysis,* Lilongwe, Malawi.
- Ministry of Education Science and Technology, (2017). National strategy on inclusive education, 2017-2021. Lilongwe: Government Print. Disabilities: *Implications for Theological Education*.
- Ministry of Education Science and Technology, (2018). Revised readmission policy for Primary and Secondary Schools. May 2018 Lilongwe, Malawi
- Ministry of Education Science and Technology. (2014). Education statistics 2014: *Education Management Information System.* Lilongwe, Malawi: Author.
- Ministry of Education Science and Technology. (2019) CWED Selection Book, 2018/19
- Ministry of Education. (2018). *Education management information system 2017-2018*. Lilongwe, Malawi: Ministry of Education
- Mitchell, C., De Lange, N., & Moletsane, R. (2017). Participatory visual methodologies: Social change, community and policy. London: Sage
- Mlambo, V.C., Hlongwa, M.V., & Msthali, (2019). The Implications of Child Marriages and their Developmental Effects on Young Girls/Women in Sub-Saharan Africa. *African Renaissance*. DOI: https://doi.org/10.31920/2516-5305/2019/v16n2a4

- Mlangeni, A., & Chiotha, S. (2015). Why Rural Community Day Secondary Schools students' performance in Physical Science examinations is poor in Lilongwe Rural West Education District in Malawi. *Educational Research and Reviews*, 10. 290-299. 10.5897/ERR2014
- Mogapi, M. (2016). Examinations Wash Back Effects: Challenges to the Criterion Referenced Assessment Model. *Journal of Education and e-Learning Research*, 3(3), 75-86. DOI: 10.20448/journal.509/2016.3.3/509.3.78.86
- Mohajan, H., (2019). The First Industrial Revolution: Creation of a New Global Human Era, Journal of Social Sciences and Humanities, 5(4), 377-387. https://mpra.ub.uni-muenchen.de/96644
- Mokaleng, M., & Möwes, A. (2020). Issues Affecting the Implementation of Inclusive Education Practices in Selected Secondary Schools in the Omaheke Region of Namibia. *Journal of Curriculum and Teaching. 9*, 78. 10.5430/jct.v9n2p78.
- Mokaya, Z.M. (2013). Influence of School Infrastructure on Students' Performance in Public Secondary Schools in Kajiado County, Kenya. Doctoral Dissertation, University of Nairobi, Nairobi.
- Molema, C.C.M., Wendel-Vos, G.C.W., ter Schegget, S. *et al.* (2019). Perceived barriers and facilitators of the implementation of a combined lifestyle intervention with a financial incentive for chronically ill patients. *BMC Family Practicum 20*, 137 https://doi.org/10.1186/s12875-019-1025-5
- Monje, L. D. (2017). "General Education Teachers' Attitudes about Inclusion"

 Dissertations. 3102. https://scholarworks.wmich.edu/dissertations/3102

- Montgomery P., Hennegan, J., Dolan, C., Wu, M., Steinfield, L., & Scott, L. (2016).

 Menstruation and the Cycle of Poverty: A Cluster Quasi-Randomised

 Control Trial of Sanitary Pad and Puberty Education Provision in Uganda.

 PLoS ONE, 11(12), e0166122. https://doi.org/10.1371
- Moon, K., Brewer, T. D., Januchowski-Hartley, S. R., Adams, V. M., & Blackman, D. A. (2016). A Guideline to improve qualitative social science publishing in ecology and conservation journals. *Ecology and Society*, 21(3), 1-20. [17]. https://doi.org/10.5751/ES-08663-210317
- Morita, N., Nakajima, T., Okita, K., Ishihara, T., Sagawa, M., & Yamatsu, K. (2016).

 Relationships among fitness, obesity, screen time and academic achievement in

 Japanese adolescents. *Physiology & behavior*, 163, 161–166.

 https://doi.org/10.1016/j.physbeh.2016.04.055
- Morrison, A., & Stone, D. H. (1998). Injury surveillance in accident and emergency departments: to sample or not to sample? *Injury Prevention*, *4*(1), 50-52. https://doi.org
- Morse, J. (1991). Strategies for sampling. In J. M. Morse (Ed.), *Qualitative nursing* research: A Contemporary dialogue (pp. 127-146). Newbury Park, CA: Sage.
- Motoane, T. (2019). Girl Children's Access to Sustainable Learning in Rural Ecologies: a Bourdieuian Policy and Practice Analysis
- Mulera, D., Ndala, K., & Nyirongo, R. (2017). Analysis of factors affecting pupil performance in Malawi's primary schools based on SACMEQ survey results.

 International Journal of Educational Development, 54, 59-68.

 10.1016/j.ijedudev.2017.04.001

- Muluye, W., & Tadesse, S. (2020). The Impact of COVID-19 Pandemic on Education System in Developing Countries: A Review. *Open Journal of Social Sciences*, 8, 159-170. doi: 10.4236/jss.2020.810011.
- Musau, L., & Migosi, J. (2015). Teacher qualification and students' academic performance in science mathematics and technology subjects in Kenya. *International Journal of Educational Administration and Policy Studies*, 7. 83-89. 10.5897/IJEAPS2014.0386.gical
- Mussa, L. (2015). The role of school discipline on students' academic performance in Dar es Salaam Region, Tanzania. Med thesis submitted to the Open University of Tanzania
- Mustafa, N. (2020). Impact of the 2019-20 Coronavirus Pandemic on Education.

 International Journal of Health Preferences Research, 1-12.
- Mutale, S., Mwiche, M., Fisa R., Musonda, P., & Young T. (2021). Interventions for Keeping Adolescent Girls in School in Low- and Middle-Income Countries: A Scoping Review, 5, Frontiers in Education https://www.frontiersin.org/articles/10.3389/feduc.2020.614297
- Mwangi, E., & Mbogo, R. (2018). Parenting Early Age Boarding School Children: Challenges for Parents. 534-543. 10.14738/assrj.58.5139.
- Mwanza, M.N. (2018). Factors that influence the use of the education re-entry policy for adolescent mothers in Monze, Zambia. The Hague: *International Institute of Social Studies*.

- Nabachwa, M. G. (2012). Effects of transfer on teacher performance in selected secondary schools in Kampala District. Unpublished Master's thesis. Makerere University, Kampala, Uganda.
- Namanyane, T., & Shaoan, M.R. (2021). Inclusive Education: A Literature Review on Definitions, Attitudes and Pedagogical Challenges, *International Journal of Research and Innovation in Social Science* (IJRISS) *5*(3). https://dx.doi.org/10.47772/IJRISS.2021.5324
- National Council on disability in USA. (2013). F Street, NW 850Washington, DC 2004
- National Research Council (2018). Using Science to Improve the BLM Wild Horse and Burro Program: *A Way Forward*. Washington, DC: National Academies Press. 383
- Ndlovu, E., & Bhala, E. (2016). Menstrual hygiene A salient hazard in rural schools: A case of Masvingo district of Zimbabwe. Jàmbá: *Journal of Disaster Risk Studies.* 8, 10.4102

 https://www.researchgate.net/publication/290473831
- Ndlovu, H. (2016). Disabilities: Implications for Theological Education: *African Perspectives Journal of Disability & Religion, Vol. 0* issue-1-2.
- Ndlovu-Gatsheni (2016). Decolonization, Development and Knowledge in Africa Turning

 Over a New Leaf, 1st Edition.
- Ngeno, V., Simatwa, E.M.W. & Sol, D.Ch. (2013). Determinants of Girl Students' Academic Achievement in Mixed Day and Boarding Secondary Schools in Kericho District, *An Analytical Study. Educational Research*, *4*(7), pp.543-544.
- Ngulube, P. (2015). Qualitative Data Analysis and Interpretation: *Systematic Search for Meaning.* 10.13140/RG.2.1.1375.7608

- Njeru, E., and Orodho, J. (2003) Education Financing in Kenya: Secondary School-Bursary Scheme Implementation and Challenges. Institute of Policy Analysis and Research Discussion Paper (IPAR DP/035/2003), Nairobi.
- Novitasari, F., Drestalita, N., & Maryati, S., (2020). The impacts of infrastructure development on economic growth (case study: DKI Jakarta, Banten Province and West Java Province). *IOP Conference Series: Earth and Environmental Science*. 592, 012017. 10.1088/1755-1315/592/1/012017
- Nworgu, B.G. (1991). Educational Research: Basic Issues & Methodology. Ibadan: Wisdom Publishers (Chapter 7).
- Ofori, K.N., Tordzro, G., Asamoah, E.A., & Achiaa, E. (2018). The Effects of Indiscipline on Academic Performance of Junior High School Students in the Fanteakwa District of Ghana. *Journal of Education and Practice*, *9*, 109-117.
- Ogechukwu, Dr., & Chika, N. (2018). Extent of Academic Achievement of Day and Boarding Secondary Schools Students in Anambra State, *Nigeria. International Journal of Scientific Research and Management.* 6. 10.18535/ijsrm/v6i1.el03.
- Ogunsajo, S. (1980). Some Aspects of School Management, Ibadan.
- Ohaeri & Omorojor (2020). Managing Hostels for Sustainable Students' Academic Performance in Public Universities in Rivers State. *International Journal of Innovative Social & Science Education Research 8*(3), 139-147. www.seahipaj.org
- Oketch, M. (2014) Education policy, vocational training, and the youth in Sub-Saharan Africa, WIDER Working Paper, No. 2014/069, ISBN 978-92-9230-790-5

- Olaleye, F.O. (2011). Teacher characteristics as predictor of academic performance of students in secondary schools in Osun State Nigeria. *European Journal of Educational Studies* 3(3), 505-511.
- Olson (Zephier), Melissa D., (2020). "A Qualitative Study Exploring Attachment Through the Context of Indian Boarding Schools". Public Access Theses, Dissertations, and Student Research from the College of Education and Human Sciences. 376. https://digitalcommons.unl.edu/cehsdiss/376
- Oneya, L. & Onyango, D. (2021). Perception of School Stakeholders on the Effect of School- Home Distance on Students' Academic Performance among Community Secondary Schools in Rorya District, Tanzania. *East African Journal of Education and Social Sciences*. 2. 76-81. 10.46606/eajess
- Oppenheim, A. N. (1992). *Questionnaire, design, interviewing and attitude measurement*.

 London: Pinter Pub Ltd.
- Owolabi, O. T. (2012). Effect of Teacher's Qualification on the Performance of Senior Secondary School Physics Students: *Implication on Technology in Nigeria*, *5*(6). https://www.ccsenet.org/journal/index.php/el/article/view
- Özer. N. (2014). *Physical environment and management of the classroom*. T. Argon, Ş. Sezgin Nartgün (Ed.). Classroom Management. Ankara: Maya Akademy
- Pahlke, E., Bigler, R. S., & Patterson, M. M. (2014). Reasoning about single-sex schooling for girls among students, parents, and teachers. *Sex Roles*, *71*, 261-271.
- Papay, J. P., Murnane, R. J., & Willett, J. B. (2016). The Impact of Test Score Labels on Human-Capital Investment Decisions. *The Journal of Human Resources*, *51*(2), 357–388. http://www.jstor.org/stable/24736026

- Papworth, B. (2014). Attending boarding school: *A longitudinal study of its role in students' academic and non-academic outcomes.* 10.13140/2.1.4450.1283.
- Patton D., L. & Museus, S. (2019). What Is Deficit Thinking? An Analysis of Conceptualizations of Deficit Thinking and Implications for Scholarly Research.

 Currents, 1(1), 117-130. http://dx.doi.org/10.3998/currents.
- Patton, M. (1990). Qualitative evaluation and research methods (pp. 169-186). Beverly Hills, CA: Sage.
- Patton, M. Q. (2015). Qualitative research & evaluation methods: Integrating theory and practice (4th ed.). Thousand Oaks, CA: Sage
- Patton, M.O. (2002). *Qualitative research and evaluation method* (3rd ed.). Thousand Oaks, CA: Sage.
- Paul, J., & Jefferson, F. (2019). A Comparative Analysis of Student Performance in an Online vs. Face-to-Face Environmental Science Course From 2009 to 2016. *Front. Computer. Science*, 1(7), doi: 10.3389/fcomp.2019.00007
- Pavlova, M., and Maclean, R. (2013). Vocationalisation of Secondary and Tertiary Education: Challenges and Possible Future Directions in Maclean R;, Jagannathan, S. and Sarvi, J. (2013) *Skills Development for Inclusive and Sustainable Growth in Developing Asia-Pacific*. Springer Dordrecht Heidelberg New York, London.
- Payne, G. & Payne, (2004). Key concepts in Social Research. London Sage Publication.
- Perez II, D., Ashlee, K., Do, V., Karikari, S. & Sim, C. (2017). Re-Conceptualizing Student Success in Higher Education: Reflections From Graduate Student Affairs

- Educators Using Anti-Deficit Achievement Framework. *Journal on Excellence in College Teaching*. 28, 5-28.
- Peterson, J. (2017). *Native American Boarding Schools: Stories of Resilience in the Face of Assimilation*, University of Minnesota Duluth.
- Pham, J. H. (2018). New Programmatic Possibilities: (Re) Positioning Preservice Teachers of Color as Experts in Their Own Learning. *Teacher Education Quarterly*, 45(4), 51–71. https://www.istor.org/stable/26762168
- Piekkari, R., Plakoyiannaki, E., & Welch, C. (2010). "Good' case research in industrial marketing: Insights from research practice", *Industrial Marketing Management,* 39(1), 109-117. doi.org/10.1016/j.indmarman.2008.04.017
- Pinto, R. (2019). The Effect of Western Formal Education on the Ghanaian Educational System and Cultural Identity. *The Journal of Negro Education*, *88*(1), 5–16. https://doi.org/10.7709/jnegroeducation.88.1.0005
- Pokharel, S. (2018). Subtle Discrimination in Education. 25, 33-39. https://www.researchgate.net/publication/331974340
- Polsky, S. (1997). Winning medicine: professional sports team doctors' conflicts of interest. *Journal of Contemporary Health Law & Policy, 14*, 503.
- Poon, J., Zeman, J., Miller-Slough, R., Sanders, W. & Crespo, L. (2017). Good enough" parental responsiveness to Children's sadness: Links to psychosocial functioning, *Journal of Applied Developmental Psychology, 48*, 69-78.
- Portugal, L. M. (2017). A Framework for Determining Research Credibility.

 Examines in Physical Medicine and Rehabilitation: *Open Access* 1(2).

 EPMR.000506. DOI:10.31031/EPMR.2017.01.000506

- Psacharopoulos, G., & Patrinos, H. (2018) Returns to investment in education: a decennial decimal of global literature, *Education Economics*, *26*(5), 445-458. https://doi.org/10.1080/09645292.2018.1484426
- Psaki, S.R., B.S. Mensch, E.K. Chuang, and A.J. Melnikas. (2019). "Does education improve health in low- and middle-income countries? Results from a systematic review." GIRL Center Research Brief No. 5. New York: Population Council.
- Puspitaningtyas Z., (2013). Perilaku *Investor Dalam Pengambilan Keputusan Investasi*di Pasar Modal, Forum Manajemen Indonesia.
- Quimby, J.L., & DeSantis, A. M. (2006). The influence of role models on women's career choices. *The Career development quarterly, 54.* 297-306.
- Rafique, S. (2021). Impact of Hostel life on Personality Attributes of Young adults:

 A Case study from a Public Sector University, *Psychology and Psychotherapy Research Study, 4*, 10.31031/PPRS.2021.04.000595.
- Ramli, A. & Mohd, Z., & Rosmaizura. (2019). *The impact of facilities on student's academic achievement.* 30, 299-311. https://www.researchgate.net/
- Reynolds, A. J. Chen, C. C., & Herbers, J. E. (2013). School mobility and developmental outcomes in young adulthood. *Development and psychopathology*, *25*(2), 501515. https://doi.org/
- Robertson, S., Cassity, E., & Kunkwenzu, E.D. (2017). *Girls' Primary and Secondary Education in Malawi*: Sector Review: Final Report.
- Robeyns, I. (2003). Sen's capability approach and gender inequality: selecting relevant capabilities. *Feminist Economics*, 9, 61 92.

- Robinson, K. (2016). The effect of technology integration on high school students' literacy. *Teaching English with Technology*, *16*(3), 3-16.
- Robinson, L. R. (2016). *In Black and White: The achievement gap and the integration of schools*. https://digitalcommons.kent.edu/ugresearch/2016/2016all/26/
- Robson, C. (1993). Real world research. Oxford, UK: Blackwell
- Roche, S. (2016). Education for all: Exploring the principles and process of inclusive education. *International Review of Education*. https://researchgate.net/
- Rockoff, J.E., Jacob, B.A., Kane, T.J., & Staiger, D.O. (2011). Can You Recognize an Effective Teacher when You Recruit One. *Education Finance and Policy*, 6, 43-74.
- Rodon, J. (2008). Towards a Framework for the Transferability of Results in IS

 Qualitative Research.
- Rodon, J., & Sesé, F. (2008). Towards a framework for the transferability of results in IS qualitative research. Sprouts: *Working Papers on Information systems*, *8*(17): 1-42. http://sprouts.aisnet.org/8-17
- Rogelberg, S. G., & Stanton, J. M. (2007). Introduction: Understanding and dealing with organizational survey nonresponse.
- Rohmah, Wafrotur, Dhany Efita Sari, & Aprilya Wulansari. (2019).

 "Pembelajaran Berbasis Teaching Factory Di SMK Negeri 2

 Surakarta." Jurnal Pendidikan Ilmu Sosial 29(2), 78–85
- Rúnarsdóttir, E., Smith, E., & Arnarsson, A. (2019). The Effects of Gender and Family Wealth on Sexual Abuse of Adolescents. *International Journal of*

- Environmental Research and Public Health, 16 (10). https://doi.org/10.3390/ijerph16101788
- Sabitu, A.O., Babatunde, E.G & Oluwole, A.F. (2012). School types, facilities and academic performance of students in senior secondary schools in Ondo State, Nigeria. *International Education Studies*, *5*, (3), 1-5.
- Sacks, H. (1992). Lectures on conversation, 1 & 2, edited by G. Jefferson. Oxford:

 Blackwell.
- Saikia N., Moradhvaj, & Bora J.K., (2016). Gender Difference in Health-Care Expenditure: Evidence from India Human Development Survey. PLoS ONE 11(7), 0158332. 10.1371/journal.pone.0158332
- Sarantakos, S. (2005). Social Research. 3rd Edition, Palgrave Mac-Millan, New York.
- Sari, M. (2017). Teachers' Views on Co-Education: Co-Education or Single-Sex Education?. *Acta Didactica Napocensi*, *10*, 35-44. 10.24193/adn.10.3.3.
- Saunders, M. N. K., Lewis, P. & Thornhill, A. (2009). *Research Methods for Business Students* (5th ed.). London: Pearson Education.
- SC, IDS and UNESCO (2016). World Social Science Report 2016, Challenging Inequalities: Pathways to a Just World, UNESCO Publishing, Paris.
- Schlechty, P. (1997). *Inventing Better Schools: An Action Plan for Educational Reform.*San Francisco, Calif: Jossey-Bass.
- Schleicher, A. (ed.) (2012), Preparing Teachers and Developing School Leaders for the 21st Century: Lessons from Around the World, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264174559-en

- Schultz, T. Paul (1987): Education Investments and Returns in Economic Development, *Center Discussion Paper, No. 528,* Yale University, Economic Growth Center, New Haven, CT
- Scroggins, T., N. (2015). Single –sex and Co-educational schools: A Comparison of Leadership Practices that Promote success for boys of color
- Sen. A., 1989. "Development as Capability Expansion," *Journal of Development Planning 19,* 41–58. An especially accessible and succinct account of the capability approach to human development.
- Shahzad S.J.H., Ali P., Saleem F., Ali S., Akram S., (2013). Stock Market Efficiency:

 Behavioral or Traditional Paradigm? Evidence from Karachi Stock Exchange

 (KSE) and Investor Community of Pakistan, "Interdisciplinary Journal of Contemporary Research in Business", 4(10).
- Shannon, A., Melendez-T., & Hennegan, J. (2020). How do women and girls experience menstrual health interventions in low- and middle-income countries? Insights from a systematic review and qualitative metasynthesis. *Culture, health & sexuality, 23,* 1-20. 10.1080/13691058.2020.1718758.
- Shannon, G.S., & Bylsma, P. (2007). The Nine Characteristics of High-Performing Schools: A research-based resource for schools and districts to assist with improving student learning. (2nd ed.) Olympia, WA: OSPI
- Sharma, M. (2021). Best Practices of Inclusive Education in Himachal Pradesh. *Academia Letters*, Article 2348. https://doi.org/10.20935/AL2348

- Sharma, U. (2018). *Preparing to teach in inclusive classrooms*. In G. W. Noblit (Ed.),
 Oxford Research Encyclopedia of Education (pp. 1-22). Oxford UK: Oxford
 University Press.
- Shields, C.M., Bishop, R., & Mazawi, A.E. (2005). Pathologizing practices: The impact of deficit thinking on education (New York, NY: Peter Lang).
- Shikalepo, E. (2020). *Defining a Conceptual Framework in Educational,* Research.

 Retrieved from 10.13140/RG.2.2.26293.09447.
- Showkat, N., & Parveen, H. (2017). *Non-probability and probability sampling. Media*& Communication Studies, 7, 1-10. http://2314/2023/sa.uz
- Shukla, S. (2020). Concept of population and sample.
- Signorella, M. & Hayes, A. & Li, Y. (2013). A Meta-Analytic Critique of Mael et al.'s (2005)

 Review of Single-Sex Schooling. Sex Roles, 69. 423-441. 10.1007/s11199-013-0288-x
- Simon F. & Ian C. (2015). Closing the policy gaps, *Building Research & Information*, *43*(4), 399-406, DOI: 10.1080/09613218.2015.1041298
- Simons, H. (2009). Case Study Research in Practice. London: Sage.
- Skalli, L. H. (2015). The "Girl Factor" and the (In) Security of Coloniality: A View from the Middle East. *Alternatives: Global, Local, Political, 40*(2), 174–187. http://www.jstor.org/stable/
- Slaney, K. L., & Racine, T. P. (2013). Constructing an understanding of constructs [Editorial]. *New Ideas in Psychology, 31*(1), 1–3. https://doi.org/10.1016/
- Slife, B. & Wright, C., & Yanchar, Stephen. (2016). Using operational definitions in research: A best-practices approach. *Journal of Mind & Behavior*, 37, 119-140.

- Smith, L. & Haddad, L. (2000). Explaining Child Malnutrition In Developing Countries: A Cross-Country Analysis.
- Somani, T. (2017). Importance of Educating Girls for Overall Development of Society: A Global Perspective, *Journal of Educational Research and Practice*, *7*(1), 125-139. https://scholarworks.waldenu.edu
- Songsore, E. & White, B. (2018). Students' perceptions of the future relevance of statistics after completing an online introductory statistics course. Statistics *Education Research Journal*, *17*, 120-140.
- SOS (2018). Poverty in Africa. (Online) Available at https://www.soschil
- Sothy, C. (2021). The impact of the COVID-19 pandemic on education in Cambodia.

 British Journal of Education, 9(1), 13-19.
- Spear, N. (2006). In response to: Koch T. (2006) Establishing rigour in qualitative research: the decision trail. Journal of Advanced Nursing *53*(1), 91–100. *Journal of Advanced Nursing*, *55*. 788-9. 10.1111/j.1365-2648.2006.03969.
- Stahl, N. & King, J. (2020). Expanding Approaches for Research: Understanding and Using Trustworthiness in Qualitative Research, 4, 26-28.
- Stake, R. (1994). Case studies. In N. K. Denzin, & Y. S. Lincon (Eds.), *Handbook of Qualitative Research* (pp. 236-247). London: Sage.
- Stenfors, T., Kajamaa, A., & Bennett, D. (2020). How to assess the quality of qualitative research. *The Clinical Teacher*, *17*, 10.1111/tct.13242.
- Storbacka, K. (2011). A solution business model: Capabilities and management practices for integrated solutions. *Industrial Marketing Management*, *40.* 699-711. 10.1016/j.indmarman.2011.05.003

- Summers, L. 1994. *Investing in all the People*. EDI Seminar Paper No. 45. New York, USA.
- Swainson, N. & Bendera, S. & Gordon, R. & Kadzamira, E. & Development, UK. (1998).

 Promoting Girls' Education in Africa *The Design and Implementation of Policy Interventions*. http://lst-iiep.iiep-unesco.org/cgi-bin/wwwi32.exe/[in=epidoc1.in].
- Taherdoost, H. (2017). *Determining Sample Size; How to Calculate Survey Sample Size*. https://www.researchgate.net/publication/322887480
- Tan, E. (2014). Human Capital Theory: A Holistic Criticism. *Review of Educational Research*, 84(3), 411–445. http://www.jstor.org/stable/24434243
- Tan, M. & Bodovski, K. (2020). Compensating for Family Disadvantage: An Analysis of the Effects of Boarding School on Chinese Students' Academic Achievement. FIRE: Forum for International Research in Education. 6. 36-57. 10.32865
- Teachers Union of Malawi. (2007). *Teacher issues in Malawi*. Workshop paper (unpublished).
- Thabane, L., Ma, J., Chu, R. A. Ismaila, J. Cheng, L. Rios, R. Robson, L.Giangregorio, L., & Goldsmith, G.C. (2010). A tutorial on pilot studies: the what, why and how. BMC Medical Research Methodology, 10(1). https://doi.org/10.1186/147
- The World Bank, UNESCO and UNICEF (2021). The State of the Global Education Crisis:

 A Path to Recovery. Washington D.C., Paris, New York
- Tollefsen, D. (2003). Participant Reactive Attitudes and Collective Responsibility. *Philosophical Explorations*, 6, 218-234. 10.1080/10002003098538751

- Tomlinson, C. (1999). The differentiated classroom: Responding to the needs of all learners. Alexandria, VA: Association for Supervision and Curriculum Development.
- Trevin L. (2018) Assessing Competing Perspectives: A Critical Analysis of Guyana's National Grade Six Assessment Africology. *The Journal of Pan African Studies*, 11(4). https://www.ipanafrican.org/docs/vol11no4/11.4-10-London.pdf
- Tulbure, C. (2012). Learning styles, teaching strategies and academic achievement in higher education: A cross-sectional investigation, *Procedia Social and Behavioral Sciences*, 33, 398 402. doi:10.1016/j.sbspro.2012.01.151
- Turner, S., Cardinal, L.B., Richard, M., Burton, R.M (2015). Research Design for Mixed Methods: A Triangulation-based Framework and Roadmap. https://doi.org/10.1177/1094428115610808
- UKEssays. (November 2018). Case Study Research and Different Research Methods

 Psychology Essay. https://www.ukessays.com/essays/
- Ullah, R & Ullah, Dr. (2019). Boys versus Girls Educational Performance in Education: Evidences from Global North and South. *African Educational Research Journal* 7(4), 163-167. https://www.researchgate.net/
- UNESCO (2017a). Global education monitoring report 2017/8: Accountability in education: Meeting our commitments. UNESCO: Paris.
- UNESCO (2021). When schools are shut. *Gendered impacts of COVID-19 school closures*, 7, place de Fontenoy, 75352 Paris 07 SP, France.

- UNESCO. (2015). SDG4-Education 2030, Incheon Declaration (ID) and Framework for Action. For the Implementation of Sustainable Development Goal 4, Ensure Inclusive and Equitable Quality Education and Promote Lifelong Learning Opportunities for All, ED-2016/WS/28
- UNESCO. (2017). A guide for ensuring inclusion and equity in education. Paris: UNESCO.
- UNESCO. (2019). Global Education Monitoring Report.
- UNESCO. (2020). Global Education Monitoring Report Gender Report: *A new generation: 25 years of efforts for gender equality in education.* Paris, UNESCO
- UNESCO. (2021). When schools are shut. *Gendered impacts of COVID-19 school closures*, 7, place de Fontenoy, 75352 Paris 07 SP, France. https://dergipark.org.tr/en/download/article-file/660892
- UNODC, Global Report on Trafficking in Persons (2016). (United Nations publication, Sales No. E.16.IV.6).
- Urhahne, D. & Wijnia, L. (2021). A review on the accuracy of teacher judgments. *Educational Research Review, 32*, 100374. 10.1016/j.edurev.2020.100374.
- Valentino, S. (2012). The Typical Boarding School. From (Retrieved on March 03, 2012).
- Van Mieghem, A., Verschueren, K., Petry, K., & Struyf, E. (2018). An analysis of research on inclusive education: a systematic search and meta review. *International Journal of Inclusive Education*, *24*, 675 689.

- Voigt, K., & Spies, M. (2020) "Female Education and Social Change: Changing Perceptions of Women's Roles in Society in the High Mountains of Northern Pakistan," Mountain Research and Development, 40(4).
- Walker, Pearce, C., Boe, K. & Lawson, M. (2019). The power of education to fight inequality, *Oxfam briefing paper*. www. Oxfam paper.
- Wallace, C. (2015). Do School Accountability Systems Make it more Difficult for low Performing Schools to Attract and Retain High- Quality Teachers? *Journal of Policy Analysis and Management*, 23(2), 251-271.
- Warfa, A.Z (2019). Mixed-Methods Design in Biology Education Research: Approach and Uses, CBE—*Life Sciences Education*. http://www.lifescied.org/
- West, A. & Hind, A., (2016). Secondary school admissions in London 2001-2015: compliance, complexity and control. *London School of Economics and Political Science*, Department of Social Policy, London, UK, Volume Clare Market Papers, 20, pp. 1-26.
- Winarno, A. & Sari, E. (2019). Teaching Factory Learning Has Not Been Effective in Increasing the Entrepreneurial Spirit of Vocational High School Students. *Jurnal Pendidikan Bisnis dan Manajemen*, 5, 58-65. 10.17977/um003v5i22019p058
- Wisniewska, D. (2011). Mixed Methods and Action Research: similar or different?

 Glottodidactica. *An International Journal of Applied Linguistics*, 37.

 10.14746/gl.2011.37.5
- Wodon Q, Tavares P, Fiala O, Le Nestour A, Wise L. (2020). *Ending child marriage:*Child marriage laws and their limitations.

- Wood, J. L., & Williams, R. C. (2013). Persistence factors for Black males in the community college: An examination of background, academic, social, and environmental variables. Spectrum, *A Journal on Black Men, 1*(2), 1-28.
- World Bank (2018) *World Bank Report*. Learning to Realize the Education's Promise.

 Retrieved from http://openknowlledge.worldbank.org.
- World Bank (2018). *Malawi Economic Monitor*, May 2018: Realizing Safety Nets' Potential. © Lilongwe, World Bank. http://hdl.handle.net/10986/29872
- World Bank, UNICEF (2009). Abolishing school fees in Africa; Lessons from Ethiopia, Ghana, Kenya, Malawi and Mozambique. *Development Practice in Education*. Retrieved from ight-to-education.org/sites/right-to-education.org/files/resource-attachments/UNICEF_WB_
- Xu, D., & Li, Q. (2018). Gender achievement gaps among Chinese middle school students and the role of teachers' gender. *Economics of Education Review*, *67*, 82–93. https://doi.org/10.1016/j.econedurev.2018.10.002.
- Yala, P. O. & Wanjohi, W. C. (2011). Performance determinants of KCSE in mathematics in secondary schools in Nyamira Division, Kenya. Asian Social Science, 7(20): 107-112.
- Yanow, D. (1995). Editorial: Practices of Policy Interpretation. *Policy Sciences*, 28(2), 111–126. http://www.jstor.org/stable/4532344
- Yin, R. K (2003). *Case study research: design and methods*. 3rd edition. Thousand Oaks. Sage Publications.
- Yin, R. K. (1994). Case study research: Design and methods (2nd edition.). Newbury Park.

- Yin, R. K. (2011). *Qualitative research from start to finish.* New York, NY: Guilford Press.
- Yin, R. K. (2014). Case study research: Design and methods (5th edition). Thousand Oaks.
- Yin, R.K. (2009). Case study research: Design and methods (4th Ed.). Thousand Oaks, CA: Sage.
- Young, B. (2017). Killing the Indian in the Child: Materialities of Death and Political

 Formations of Life in the Canadian Indian Residential School System.

 https://doi.org/10.17615/zkyc-q417
- Zach, L. (2006). Using a Multiple–Case Studies Design to Investigate the Information-Seeking *Behavior of Arts Administrators*. Library Trends, 55.
- Zubairi, A. & Rose, P. (2016) Raising Domestic Resources for Equitable Education.

 Background paper for The Learning Generation. Investing in Learning for a

 Changing World, International Commission on Financing Global Education

 Opportunity. http://www.educationequity2030.org

APPENDICES

Appendix A



UUD100517-106

10 May 2017

Lewis Simkoza

Malawi

Dear Lewis,

Unicaf University is delighted to offer you a place in the following programme:

EdD - Doctorate of Education

For May 2017 entry

To finalise your registration please click on the link below and use the login credentials you received, to login to our systems in order to complete all registration procedures and pay the appropriate fees.

https://sis.unicafuniversity.com/students/login

You have also been offered a scholarship towards your studies. Please discuss the scholarship deadline and other terms and conditions of this offer with your Admissions Adviser.

We congratulate you on your decision to study with Unicaf University and we wish you good luck.

Yours sincerely

Duncan Kaonga

Admissions Department

Unical University

Appendix B

NON-COMPLETED INFORMED CONSENT FORM

INFORMED CONSENT FORM / CERTIFICATE OF CONSENT FOR RESEARCH

PARTICIPANTS

This document consists of two parts: the Informed Consent Form (to share

information about the research study with you) and the Certificate of Consent (for

signatures if you choose to participate). You will be given a copy of the full Informed

Consent Form.

This Form is for research interventions that cover the following research activities:

questionnaires, in-depth interviews, focus groups discussions, elicited conversation,

observations, recorded listening, videotaped activities and interviews.

[NB: Please use simple language and local and simplified words rather than

scientific terms and professional jargon. In your explanation, consider local beliefs and

knowledge when deciding how best to provide the information.]

Informed Consent Form for:	
Researcher's Name:	
E-mail:	
C-IIIdii.	
Programme of Study:	

Partner University:	
Project / Dissertation	
Supervisor's name:	
Supervisor's e-mail:	
Part 1: Informed Cor	nsent Form
1. Introduction	

2. The purpose / aims of the research

3. Participation in the research
*if the research includes participants under the age of 18 informed consent should be obtained by their parents or legal guardians who must be presented with all the information described on this inform consent form before giving parental permission for their children to participate. Please provide all relevant information for parents or legal guardians at the following sections (4-8 below).
4. Participant selection
5. Voluntary participation

6. Risks and benefits to participants	
7. Confidentiality	
8. Sharing the results	
9. Contact details	
J. Joinact actails	

Part 2: Certificate of Consent

This section is mandatory and should to be signed by the participant(s)

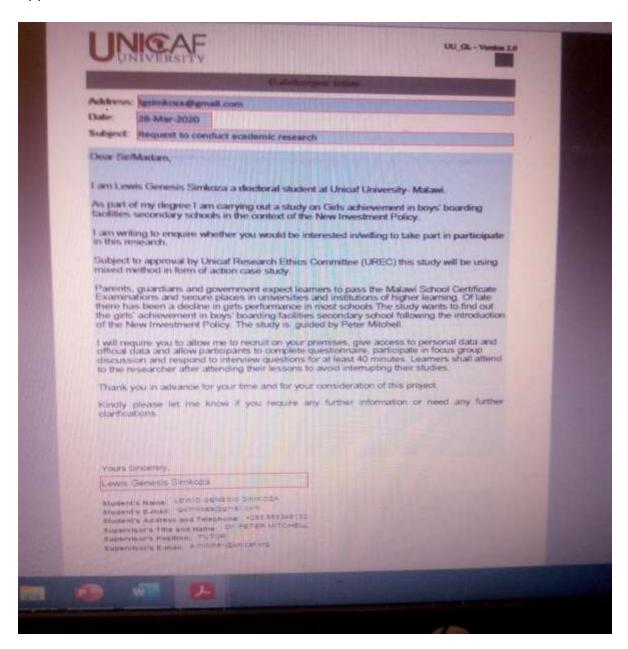
I have read the foregoing information about this study, or it has been read to me. I have had the opportunity to ask questions and discuss about it. I have received satisfactory answers to all my questions and I have received enough information about this study. I understand that I am free to withdraw from this study at any time without giving a reason for withdrawing and without negative consequences. I consent to the use of multimedia (e.g. audio recordings, video recordings) for the purposes of my participation to this study. I understand that my data will remain anonymous and confidential. I consent voluntarily to be a participant in this study.

Print name of Partic	
Signature of Particip	
Data	
Date:	
If illiterate:	

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had an opportunity to ask questions. I confirm that the individual has given consent freely.

Print name of witner	ss:
Signature of witness	C.
Date:	

Appendix C



Appendix D

QUESTIONNAIRE FOR HEAD TEACHER

INTRODUCTION.

This questionnaire is solely made to collect data for academic study, a partial fulfilment for award of Doctor of Education (EdD). The title of the study is A MIXED-METHODS INVESTIGATION ON GIRLS' ACADEMIC PERFORMANCE FROM THE NEW INVESTMENT POLICY PERSPECTIVE IN GOVERNMENT BOYS BOARDING FACILITIES SECONDARY SCHOOLS IN MALAWI

All data will be treated as confident information. Permission to conduct this study in secondary schools has been granted by the Ministry of Education Science and Technology and the Head teachers in the sampled schools.

Questions 1-4 are asking for personal information, may you kindly tick in the brackets against that which is applicable to you.

- - 6. What is the schools' current total enrolment?

Fill in the table on current school enrolment

	Boys	Girls	Total
Form 1			
Form 2			
Form 3			
Form 4			
TOTAL			

	J		tart selecting gi					
	was the	reason fo	or selecting girls					
 9.(a)	Are this	there	designated	girls	boarding	facilities	in	
so	chool?							

(b) If		response										
10. W	hat do	you think	has b	een t	he ma	jor co	ntribu	tion of t	ne girls i	n this	schoo	
	hat ha	as been the	he girl	s' pei	rforma	nce a	at Mala	awi Sch	ool Cer	tificate	e of E	ducation
	hat co	ould be so	me of	the s	chool	cond	itions	that affe	ect girls'	perfo		
		ere some										
14.ln	your	perception	n, are	there	some	e gov	ernme	ent spec	cific prov	/isions	mad	e to girls
tha	at are s	selected in	n boys	boar	ding fa	cilitie	s seco	ondary s	chools a	as day	scho	lars (you
ma	y also	include a	any oth	er for	ms of	provi	sions t	that are	made a	vailab	le in tl	ne school
for					,	girls					е	ducation)

15. In your own assessment, is the selection of girls in boys boarding facilities sch	nools
achieving quality and equality of secondary school education? Give a brief explan	atior
(you can include suggested policy direct	tion)

Appendix E

QUESTIONNAIRE TO TEACHER

INTRODUCTION.

This questionnaire is solely made to collect data for academic study, a partial fulfilment for award of Doctor of Education (EdD). The title of the study **is** A MIXED-METHODS INVESTIGATION ON GIRLS' ACADEMIC PERFORMANCE FROM THE NEW INVESTMENT POLICY PERSPECTIVE IN GOVERNMENT BOYS BOARDING FACILITIES SECONDARY SCHOOLS IN MALAWI

All data will be treated as confident information. Permission to conduct this study in secondary schools has been granted by the Ministry of Education Science and Technology and the Head teachers in the sampled schools.

Questions 1-4 are asking for personal information, may you kindly tick in the brackets against that which is applicable to you.

1. What is your gender? Male		Female
2. How many years have you been tea	aching at this school?	
3. For how many years have you been	n teaching girls in seconda	ry school?
4. What is your level of professional q	ualification?	
Diploma level □ Degree le	evel Masters level	
5. How would you describe the per	formance of girls in natio	onal examinations like
MSCE?		

6. Wh	at do you	think could b	pe the f	factors con	tributing for	your	answer in	question 5
ab	ove?							
7 (a) [Oo you thin	k there are s	ome fac	ctors relatin	g to the sch	ool in	frastructure	e that affect
gir	ls' academ	ic performan	ce?					
	(b) Give	reasons for	your an	swer				
8. <i>A</i>	Are there a	ny suggested	l schoo	l managem	ent initiative	s that	have beer	n employed
t	o keep up	with girls' pe	erforma	nce in this	school?			
9. [Describe th	e availability	of the k	key resourc	e at this sch	ool b	y indicating	g A= agree,
[D= disagre	Э						
	Number	Resource					Agree	Disagree
	1	The schoo	l has	adequate	textbooks	for		
		learners' us	е					

The school has adequate laboratories

learners' use

The school has adequate computers for

2

3

4	Teachers have the required and sufficient teaching and learning materials
5	The school has adequate classrooms
6	The school has adequate girls boarding facilities
7	The school has adequate number of teachers

10. In your own assessment is the policy on selecting girls into boys' boarding facilities
schools promoting girls' education? Give a brief explanation.

Appendix F

INTERVIEW SCHEDULE TO MINISTRY OFFICIAL

My name is Lewis Genesis Simkoza and I am a doctoral student at UNICAFMalawi, doing an educational research study. The title of the study is A MIXEDMETHODS INVESTIGATION ON GIRLS' ACADEMIC PERFORMANCE FROM THE
NEW INVESTMENT POLICY PERSPECTIVE IN GOVERNMENT BOYS BOARDING
FACILITIES SECONDARY SCHOOLS IN MALAWI

I have chosen you because of your profession and experience in secondary school education management. I thought it would be a good idea to interview you, so that I can better inform the rest about the state of education of girls' education at a boys' boarding facilities secondary school.

1.	What is your age		
2.	What is your gender	□ Male	□ Female (please tick correctly)?
3.	What is the highest educat	ional qual	ification? (Please tick as correctly)
	Diploma Bachelors	Masters	□ PhD □

- 4. How many years of experience have you had in your current job?
- 5. For how many years have you been involved in secondary school education management?
- 6. Can you tell me when Ministry of Education started implementing the new investment policy? What has been the genesis of this policy?
- 7. What has been the girls' academic performance during MSCE whilst learning in boys boarding facilities secondary school?
- 8. What was the Ministry's aim in selecting girls into these established boys' boarding

- facilities secondary schools?
- 9. Do you have any suggestions about the factors that contribute to the differences in girls' performance in these different types of secondary school categories?
- 10. Are there any challenges that the MOEST experience while managing the girls selected into boys boarding facilities secondary schools?
- 11. Are there any suggestions on how the MOEST can improve the schools to meet the needs of the girls that are selected into these boys boarding facilities secondary school?

Appendix G

INFORMATION SHEET TO LEARNERS

Title:

A MIXED-METHODS INVESTIGATION ON GIRLS' ACADEMIC
PERFORMANCE FROM THE NEW INVESTMENT POLICY PERSPECTIVE IN
GOVERNMENT BOYS BOARDING FACILITIES SECONDARY SCHOOLS IN
MALAWI

Background:

Parents, guardians, and government expect learners to pass the Malawi School Certificate Examinations and secure places in universities and institutions of higher learning. However, after the establishment of these boys boarding facilities secondary schools, the government decided to select girls in boys boarding facilities secondary schools as day scholars. This study research wants to find out the girls' achievements in the boys boarding facilities secondary schools. The findings will help policymakers to make necessary interventions that will reduce the gender inequality in secondary education provision for the girl child as Malawi strives to achieve the global goal of gender equality by 2030.

Your participation in the study

You are chosen to participate in the study because you are at one of the targeted and sampled secondary schools. It is my sincere belief that you hold the information and experience that contribute to the improvement of quality education in Malawi.

Through your Headteacher/form teacher you will be asked to fill out a questionnaire, and participate in a focus group discussion and interview. I intend to conceal your

identity and your information shall not be shared with anyone. It is solely for academic purposes. If you feel not comfortable participating you have the right to withdraw at any stage without any consequences.

Benefits

There are no direct benefits such as remunerations or compensation apart from making a contribution to the body of knowledge that can improve the quality of secondary school education among females in Malawi.

Lastly, I will not fail to say "thank you" for having participated in this study.

If there are any questions about the study contact the researcher, Lewis Genesis Simkoza at +265 888348 132, email @ lgsimkoza@gmail.com

Name of the participant (learner)

Signature of the participant (learner)

Date:

Appendix H

QUESTIONNAIRE FOR FEMALE STUDENTS

INTRODUCTION.

This questionnaire is solely made to collect data for academic study, a partial fulfilment for award of Doctor of Education Degree (EdD).

The title of the study is A MIXED-METHODS INVESTIGATION ON GIRLS'

ACADEMIC PERFORMANCE FROM THE NEW INVESTMENT POLICY

PERSPECTIVE IN GOVERNMENT BOYS BOARDING FACILITIES SECONDARY

SCHOOLS IN MALAWI

All data will be treated as confident information. Permission to conduct this study in secondary schools has been granted by the Ministry of Education Science and Technology and the Head teachers in the sampled schools.

1. Age
2. Are you a self-boarder $\ \square$ boarder $\ \square$ day scholar $\ \square$ (tick the correct one)
3. For how long have you being in self-boarding, boarding and day school
□ 1 year
□ 2 years
□ 3 years
□ 4 years
4. What is the distance from home background to this school?
□ less than 10km
□ more than 10 km but less than 20 km

	□ more than 20 km
	5. Do you think it is manageable to walk this distance going to school on each day?
	6. Type of secondary school
	(a) Boys boarding facilities school (b) district boarding facilities school
	7. Boarding status of the student
	(a) Self- boarding facility (b) school- boarding facility
	8. (a) Are there toilets within the hostels for your use?
	(b) If yes, what type of toilets do you have in the hostels?
	9. (a) Is there running water in the hostels?
	(b)What type of bathrooms do you have within the hostels?
	10. Can you describe how your academic performance has been since you joined
	the school? (Choose the correct option)
	$\ \square$ has improved $\ \square$ has not improved $\ \square$ has remained the same.
	11. What have been your motivating factors to perform better while studying at his
	school?
	a
	b
	C
	d
12.(a)	Have you ever experienced any challenges while staying in the hostels that affect
	your academic performance?
	(b) If yes, what have been the challenge?

	a
	b
	C
	d
13. (a)	Are there moments when some teaching and learning opportunities are given to
	boys only?
	(b) If yes, can you cite examples where girls are not given same opportunity as
	boys in the teaching and learning process?
	14. Are you hopeful of more possibilities of improving girls' performance in this
	school? Suggest the ways in which that girls' academic performance can be
	improved
	a
	b
	C
	d
15. (a)	Do you think the absence of girls' boarding facilities can be a factor contributing to
	poor class performance among girls? (Consider the goals for most of the girls in
	secondary schools)
	(a) Give reasons for your answer

16.	Should there be an opportunity to transfer to another secondary school, which type
	f school you would want to transfer to
	(a) Community Day school (b) District Boarding School (c) Boys' boarding facilities
	school
	(b) What reason do you give for your choice in question 12 (a)
	above?
	,

Appendix I

MINI FOCUS GROUP DISCUSSION QUESTIONS TO THE STUDENTS

The aim of this focus group discussion is to tap more knowledge from the girls which may not be covered from the questionnaires. This will facilitate comparing the views of against the views of the rest of the respondents. The research design requires that the topic must be discussed in a group as well as, under this circumstance, the researcher can only convene a small group of not more than six participants. It might take between 25-40 minutes in day one. This focus group discussion is designed to assess your current thoughts and feelings about the quality of girls' secondary school education at a boys' boarding facilities secondary school in the context of the new investment policy in Malawi.

DEMOGRAPHIC DATA

May you please answer the following questions in the spaces provided, circle or tick the most appropriate options and upload it to my WhatsApp number +265888348132

1. Age		
2. Are you a self-boarder $\ \square$	boarder	day scholar □
3. For how long have you been in	n self-boarding	, boarding, and day school
□ 1 year		
□ 2 years		
□ 3 years		
□ 4 years		

4. What is your distance from home background?

- □ less than 10km
- □ more than 10 km but less than 20 km
- □ more than 20 km

INSTRUCTION

May you kindly try to answer and comment as according to the questions and respect the views of others. It is only in this forum that discussions and comments about the topic should be made.

- 1. What is your impression on how girls that are selected as day scholars perform during MSCE as compared to their counterparts that are selected in district boarding schools?
- 2. How has been your challenge in studying for your national examinations from primary school level to secondary school level?
- 3. What resources do think are best effective and efficient in promoting girls' education at a boys boarding facilities school?
- 4. How familiar are you with the New Investment Policy in Malawi, in which some girls are selected in boys' secondary schools as day scholars?
- 5. How do you describe your experience in learning experience in the boys boarding facilities school?
- 6. From your learning experience, how likely would you recommend girls to attend boys boarding facilities secondary schools?
- 7. Do you have any suggestions on how we could improve the performance of girls whilst learning in boys boarding facilities secondary schools?

Appendix J

TELEPHONE INTERVIEW QUESTIONS TO FEMALE STUDENTS

My name is Lewis Genesis Simkoza and I am a doctoral student at UNICAFMalawi, doing an educational research study. The title of the study is A MIXEDMETHODS INVESTIGATION ON GIRLS' ACADEMIC PERFORMANCE FROM THE
NEW INVESTMENT POLICY PERSPECTIVE IN GOVERNMENT BOYS BOARDING
FACILITIES SECONDARY SCHOOLS IN MALAWI

I have chosen you because of you are currently attending your secondary school education at either a district boarding school or at a boys' boarding facilities secondary school. I thought it would be a good idea to interview you, so that I can better inform the rest about the state of education in district secondary schools. The interview might take about between 15-20 minutes.

1. Age			
2. Are	you a self-boarder $\ \square$	boarder	day scholar □
3. For how long have you being in self-boarding, boarding and day school			
	□ 1 year		
	□ 2 years		
	□ 3 years		
	□ 4 years		
4. What is your distance from home background?			
	□ less than 10km		

□ more than 10 km but less than 20 km

□ more than 20 km

- 1. How do you compare girls' academic performance and boys' academic performance at national examinations at this secondary school?
- 2. What has been your experience learning with boys in the same class, the same subjects by the same teacher? What are the advantages?
- 3. What is your impression about the academic performance of the girls in school?
- 4. What has been your feeling that you were selected at this particular secondary school? (at a district boarding school/boy boarding school)
- 5. Compare how your interest in school has been from the time you joined the school to this moment; are you satisfied that you are at this school?
- 6. If you were given chance to select a secondary to attend, would it a boarding school or a day school?
- 7. What reasons can you give for your choice of secondary school to attend?