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Investigating the Impact of Unqualified Physics Teachers on Students Academic Performance - A Case of Boma Cluster in Nkhotakota District Malawi

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Abstract: In pursuit of technological development, Malawi, a developing nation, recognizes the crucial role of Physics in driving progress. However, students' poor performance in Physics remains a significant concern. This study investigates the impact of unqualified Physics teachers on students' academic performance in Boma Cluster, Nkhotakota District, Malawi. Employing a mixed-methods approach, combining quantitative and qualitative research designs, this study sampled 30 participants from three schools. Data collection methods included questionnaires, focus group discussions, and analysis of scholastic records. Results reveal a strong correlation between Physics teacher qualifications and student performance. Schools with qualified Physics teachers achieved a pass rate of over 90% in national exams, while those with unqualified teachers recorded a pass rate below 75%. The study concludes that qualified Physics teachers possess distinct advantages, including diverse teaching methodologies, student motivation, resource utilization, and effective classroom management. Recommendations include government initiatives to recruit qualified teachers, retrain unqualified ones, and provide ongoing professional development for knowledge updates.

Keywords**:** *Qualified Physics Teacher, Certification, National Examinations, Pedagogy, Academic Performance*.

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I. INTRODUCTION

➢ *Background to the Problem*

Educators, government, parents, and society in general have constantly been interested in the academic achievement of students [28]. This is due to the significant impact that education has on the country's overall development. A certain author [7] stated that teachers are a crucial contributor to the success of students' performance another one [27] added to say that teacher's qualifications and experience could help students attain excellent academic accomplishments.

The mastery of a subject is determined by the performance of the students in that subject at a prescribed examination. Any interactive activity between a teacher and the students is expected to produce learning outcomes for the learners. When such an activity fails to produce a change in behavior (learning) in the learners, then there is a problem.

There is a low physics performance in many schools [12]. For example, at Mpondagaga community day secondary school in Boma cluster, Nkhotakota district, only 25% of all physics students passed the national examinations. One author [18] pointed out that students' performance is mainly affected by three factors, namely: availability of teaching and learning resources, teachers' knowledge, and learners' motivation. Teachers' knowledge is extremely significant because they are the ones that facilitate and convey the concepts expected to be learned to students. The quality of a teacher depends largely on how knowledgeable he or she is in that particular subject, both in terms of content and pedagogically. Hence, we have under qualified, unqualified, and qualified physics teachers.

In order to be a qualified teacher, one needs to have objectives and teaching skills obtained through teacher's training institutions and on-the-job experience [13]. Physics students need to be taught by teachers who not only brings love and dedication to their professional; but also have a deep and up to date knowledge of physics concepts as well as the ability to assess students' academic strengths and weaknesses for a better assistance [30]. Since qualified teachers can act as an effective tool towards the achievement of effective learning, one may reason that these unqualified teachers are the ones causing the poor performance mentioned earlier in physics. It is therefore of great importance to inquire if these unqualified physics teachers may have certain impacts in the performance of students.

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➢ *Statement of the Problem*

Physics is the backbone of natural and applied sciences, which are important for the social and economic development of the nation [16]. It is one of the major subjects meant to provide basic concepts needed to enhance the development of technology [31]. Prospective engineers, surveyors, architects, teachers, and lecturers are physics students. Despite that the subject is very important; The 2019 and 2020 MANEB results shows that there is poor students' performance in this subject, this implies that there are challenges relating to students' learning of which one of them is the presence of unqualified physics teachers handling the subject in our secondary schools. This study therefore sought to find out the impacts of unqualified physics teachers on students' academic performance.

➢ *Purpose of the Study*

The purpose of the study was to investigate the impacts of unqualified physics teachers on students' academic performance in selected secondary schools in Boma cluster, Nkhotakota district.

➢ *Specific Objectives*

The objectives of the study were:

- To determine the differences in academic performance between students taught by qualified and unqualified physics teachers within the Boma cluster, Nkhotakota district.
- To analyze the specific impacts of physics teacher qualification on students' academic performance within the Boma cluster, Nkhotakota district

➢ *Research Hypothesis*

- There will be a significant difference in academic performance between students taught by qualified and unqualified physics teachers within the Boma cluster, Nkhotakota district.
- Higher levels of teacher qualifications will positively correlate with higher average test scores of students within the Boma cluster, Nkhotakota district.

➢ *Significance of the Study*

The findings of this study will contribute to a better understanding of the value of qualified physics teachers with regard to student academic achievement. The data can be utilized by education practitioners, such as the ministry of education, as well as other stakeholders, such as researchers and policymakers, to figure out how to improve students' academic achievement and how teacher attributes affect students' academic performance in physics.

The study is going to increase the awareness of head teachers, board of governors, and parents' teachers' association on the need to retrain teachers whose qualifications do not meet the standards that are set for the teaching of physics. It will help the school administrators and other relevant stakeholders to train and recruit teachers who have the right mix of different teacher characteristics. It will also add to the existing literature about the need to have qualified teachers who are competent enough to teach physics to students.

➢ *Definition of Terms*

Qualified Physics Teacher: refers to 'well- educated physics teacher', which has competence, that is proven using a certificate of competence or a degree [21]

Academic Performance: defined as students' ability to carry out academic tasks' and it measures their achievement across different academic subjects using objective measures such as final course grades and grading point average [11][19]

II. LITERATURE REVIEW

➢ *Introduction*

The investigation into the impact of unqualified physics teachers on students' academic performance started with a review of related literature on studies done here in Malawi and elsewhere. The review looked at a variety of topics, including teacher qualifications; the paucity of certified physics teachers in South African countries, including Malawi; and the relationship between teacher qualifications and secondary school students' physics academic achievement. The knowledge gap that justifies the study's goal was also developed in this chapter. The theoretical framework is the last part.

➢ *Teacher Qualification*

There are several ways in which teacher qualification can be quantified; that is, level of education, years of experience in preparation of subject matter and in pedagogy, what qualifications they hold in their area of expertise and their ongoing professional development [1].

A qualified teacher is defined as the one equipped with the necessary teaching qualifications, training, and experience required in passing knowledge to learners [24]. A qualified teacher is also one who has a teaching certificate and/or is licensed by the state, has at least a bachelor's degree from a four-year institution, and is well-versed in his or her field [2]. One author said that the role of such a subject specialist is to act as a storehouse of essential and well-processed information, leading to his or her students gaining deep insights into the various concepts to be taught [18]. The professional qualities of a teacher have to do with the following: mastery of the subject matter, sense of organization, ability to motivate students, good imagination, ability to involve the students in meaningful activities throughout the period of teaching, as well as frequent monitoring of students' progress through tests, formal and informal, written and oral quizzes [3].

In America, a report on evaluating the effect of teacher degree level on educational performance released by the National Commission on Teaching, which offers the general indictment of teaching professionals, reported that many newly hired teachers are unqualified for the job and many high school science teachers lack college training in their classroom subjects [6]. The education analysis recently carried out in Nigeria by the National Economic Empowerment and Development Strategy [18] indicated that more than forty-nine

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percent (49%) of the science teachers in Nigeria are unqualified. This revealed the quality of teachers teaching various science subjects, particularly physics, to secondary school students. This challenge is encountered in public secondary schools but predominantly in the private sector.

- *Unqualified Teachers and Students Academic Performance*

For education to fully achieve its purpose, teachers play a key role. They impart knowledge to students by setting a situation in which they can learn effectively [16]. A teacher is needed to guide a learner from familiar to unfamiliar territory, from simple to complex, and from concrete to abstract concepts, so that they understand the new material and perform well on their tests.

Students' poor performance in physics globally is basically due to a lack of involvement of the students in the teaching and learning activities right from the beginning of any new concept to be taught, a lack of qualified teachers as well as experience in teaching [17][4]. Another author concurred with the idea by saying that the success or failure of any educational program rests majorly on the adequate availability of qualified, competent, and dedicated teachers [8].

In contrast to that, one author studied the effects of trained and untrained teachers in classroom performance in Barbados and established that trained teachers do not have an advantage over untrained teachers in classroom performance [10]. In addition to that, [29] revealed a zero correlation between teacher qualification and students' examination scores in Kenya, Egypt, and Paraguay. Some researchers also pointed out that, students do almost as well when studying under an untrained teacher as they do when studying under a trained graduate from university [22].

- *The Scarcity of Qualified Teachers in South African Countries*

Reports says that there is a shortage of qualified teachers in Zambia with a student teacher ratio placed at 41:1, though the numeration included the unqualified, under qualified, as well as qualified teachers [25]. In Malawi Despite the growing number of training institutions that produce secondary school teachers, the education sector (2013–2018) reports that there is a great shortage of qualified science teachers as only 40% of all science teachers are qualified. The lack of qualified teachers may be due to the government's failure to recruit the required number of teachers due to budgetary limitations, perennial loss of teachers and delays in deploying teachers to schools after they graduate [31].

In the year 2016, Malawi had a great need for physics teachers since Physical Science was divided into two; Physics and Chemistry but there were only less than 50 qualified physics teachers holding bachelor's degrees in the teaching sector here in Malawi [14]. This shows the scarcity of physics teachers at the time, as well as the ongoing demand for them.

From the various reviews of literature, the impacts of unqualified physics teachers on the academic performance of students are different. Some researchers outline that unqualified physics teachers have almost no impact on students' performance in the subject. Others have argued that teachers' academic qualifications alone are not enough to produce good results, and that the issue of professionalism plays a vital role. Considering these inconclusive findings, more study is needed to confirm the otherwise vexing topic of the impact of unqualified physics teachers on students' academic performance in Boma cluster.

Above all, the majority of the literatures reviewed in this study have their origin of practice in the developed countries and few of the studies are available from developing countries, with very limited literatures from Malawi. As a result, the primary goal of this study is to see how unqualified physics teachers affects students' academic performance in the cluster.

- *Theoretical Framework*

This study relied on supervision theory developed by Robinson in 1968 [32]. The theory assumes that supervision help teachers get assurance that they work well. This earns them recognition and builds confidence in them. The theory also states that supervision of classroom instructions is necessary to ensure that functions of all teachers are coordinated. According to the theory; teachers differ in their degree of professional competence in their need for advice regarding their classroom work.

For this study, the supervision theory is necessary in order to ensure that there are adequate number of qualified teachers, good oriented programs and adequate supplies and equipment in education sector that will raise the positive impact on academic achievement of students in Physics.

III. METHODOLOGY OF THE STUDY

- *Introduction*

This chapter focused on the methodology that was employed in the study. The following issues were addressed: research design, site of study, study population, sample size and sampling techniques, data collection methods and instruments, data analysis/data analysis techniques, limitations and delimitations, logical and ethical issues.

- *Research Design*

A combination of quantitative and qualitative research designs were employed for the study. This was done to increase the overall validity of the measures and findings [5][9]. For quantitative design of the research; the study used non-experimental comparative procedure where two groups already receiving different interventions were identified, and only the post-observation with respect to the dependent variable was conducted. Qualitative data was collected with open ended questions and discussions.

- *Site of Study*

The research was conducted in the Central East Education Division (CEED), specifically in the Boma cluster, Nkhotakota district. Two secondary school and one community day secondary school were targeted. The schools are located in the central part of nkhotakota district, this area

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was picked because of a severe poor performance in physics and it is where the researcher comes from.

➢ *Study Population, Sample Size and Sampling Techniques*

- *Population Size*

The participants in this study were 3 (three) head teachers, nine (9) physics teachers and 18 (eighteen) physics students from chosen secondary schools in the Boma cluster. Lozi secondary school, Linga community day secondary school, and Nkhotakota secondary school were among the selected secondary schools.

- *Sample Size*

The sample size was derived from the total population. The sample comprised of 3 (three) head teachers, nine (9) physics teachers and 18 (eighteen) physics students. The table below outlines the distribution of samples.

Table 1: Sampled Participants for the Study

Type of Participants	Sampled Participants
Head Teachers	3
Physics Teachers	9
Students	18
Total	30

- *Sampling Techniques*

Purposive sampling procedure was used to select teachers. This procedure was used so that the research may produce reliable information since only Physics teachers were needed. Simple random sampling technique was employed to select students within those who take physics to avoid favoritism as it to provide equal chances to all physics students to participate. The head teachers of the chosen schools were also involved in this study.

➢ *Data Collection Methods and Instruments*

In order to collect data, the researcher used questionnaires and focused group meetings as described below:

- *Questionnaires*

Questionnaires were used for both teachers and students because they enabled the researcher to use the same question items for all teachers and also questionnaires give detailed answers to complex questions and therefore were the most effective ones [10]. This technique used written closed-ended and open-ended questions, and respondents were expected to create their own responses without the assistance of a researcher. Bio data for the participating teachers was also collected using the same questionnaires.

- *Focused group meetings*

The researcher had focused group meetings with the students involved in the study. Focused group discussions provides the researcher with high quality data in social context as participants get to hear each other's experience [10]. The aim of the focused group meetings in this research was to gather relevant information from the teachers that were to be left out when answering the questionnaires. The students were able to express themselves freely during the focused group discussions than when answering the questionnaires of which most of the questions on the questionnaires were close ended ones. The focus group meetings had 5 (five) participants each.

➢ *Data Analysis/Data Analysis Techniques*

Upon successful collection of data, the researcher organized the raw data systematically in frequency tables. Then graphs and pie charts were used to shed more light on the collected data

Data collected through documents (national examination results) was rated using excel which helped to make sense the collected data. In this study, the data collected was analyzed using descriptive techniques (frequencies, means and percentages).

➢ *Limitations and Delimitations*

The limitation of this study was that there are some other factors which affect students' academic performance apart from teacher's qualification such as availability of teaching and learning resources, learners' motivation and others. This limitation was dealt with by ensuring that the other factors are kept constant during the study.

➢ *Logistical and Ethical Issues*

The researcher had a permission letter from the District Education manager before collecting data. The researcher was introducing himself to the respondents and explains to them the purpose of the study. The respondents were reminded that participation is voluntarily and the participant can withdraw and refuse to participate at any time with no penalty. The respondents were assured that all the responses will be kept confidential that it will not be revealed without their consent.

IV. DATA PRESENTATION, INTERPRETATION AND DISCUSSIONS OF RESULTS

➢ *Introduction*

This chapter deals with data presentation, interpretation and results discussions. In this chapter the researcher presents and discusses results from documents analyzed, interviews conducted and questionnaires administered.

➢ *Presence of Unqualified Physics Teachers*

Head teachers of the schools involved in this study were asked to provide the qualifications of their physics teachers; the following graph summarizes the data given.

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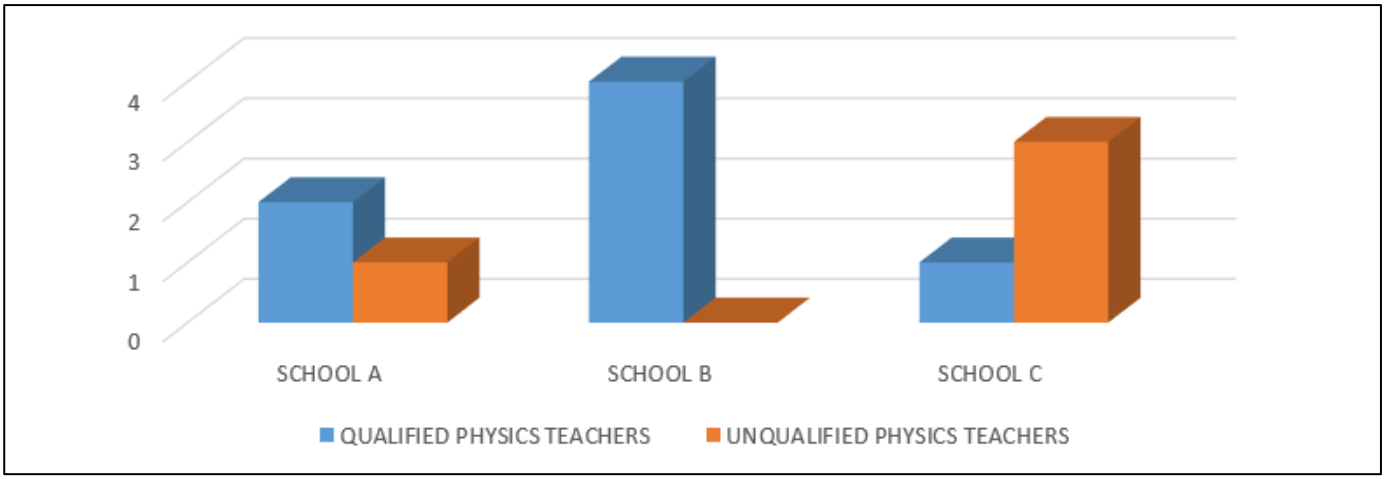

Fig 1 Number of Qualified and Unqualified Physics Teachers

According to the graph above, School B have got more qualified physics teachers as compared to the other two schools. School C possesses many unqualified physics teachers and this will give us more chance to differentiate the academic performance with the other schools in terms of qualification.

➢ *Physics Students' Academic Performance in the Study Schools*

Head teachers of all the schools were requested to provide the Malawi School Certificate of Education (MSCE) scholastic physics sheet for the Malawi National Examination Board (MANEB) for the three years (2019, 2020, and 2022).

The performance is presented in the graph below in terms of pass rates.

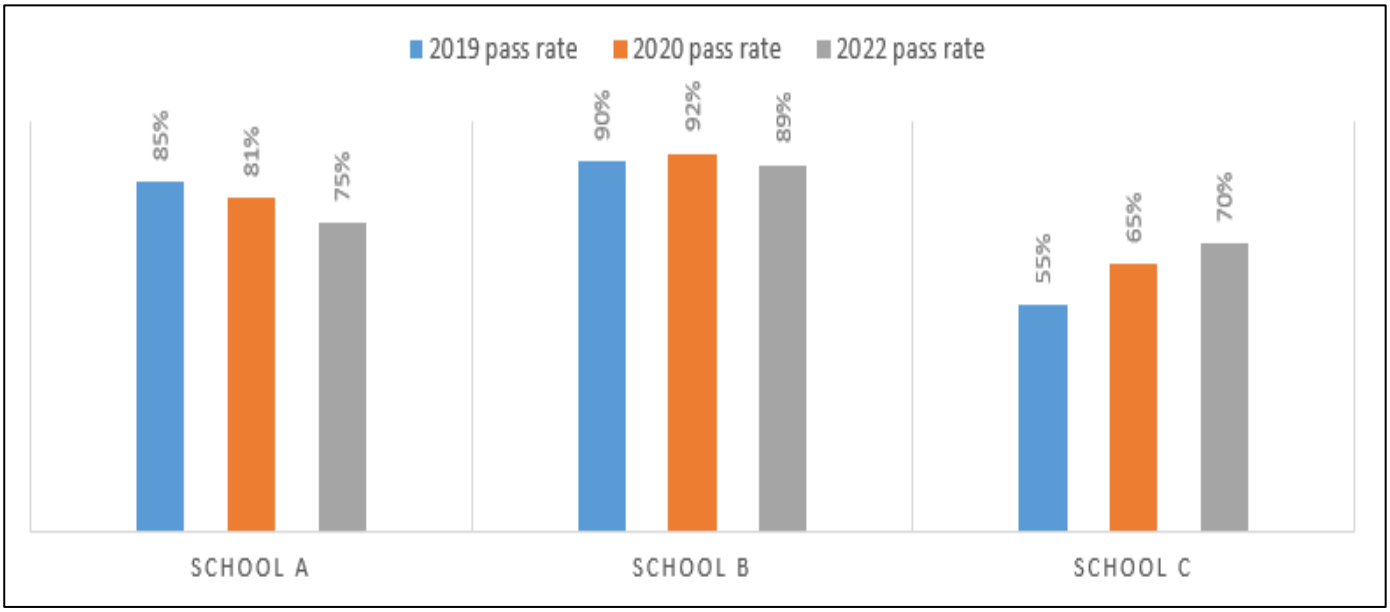

Fig 2 Physics Academic Performance in the Study Schools (Pass Rate)

According to the graph above, School B is having a higher physics pass rate followed by school A. School C is having the lowest pass rate. We can also recognize that school C's pass rate is increasing each year and school A's pass rate is dwindling while School B is almost consistent. Comparing this pass rate with the number of qualified teachers (figure 1), we can tarry these two results by saying "there is a direct relationship between the number of qualified physics teachers and its corresponding academic performance", school B which is having many qualified teachers is also producing very good results as seen in figure 2. School A and School C follow this in such an order.

This is in agreement with a certain author who said that the more the untrained teachers are in a system, the more dwarf the system will be, hence that low pass rate looks to be proportional to the teachers qualification [3].

➢ *Teachers' Aspects and Qualifications*

Students were asked if their physics teacher possesses the required physics teacher aspects such as giving class tests more often, making corrections, being approachable, varying teaching methodologies, class management and motivation, the responses are presented in the table below:

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Table 2 Showing The Teachers' Aspects and Qualification

Teacher Aspect	Response	Response Frequency	Percentage
Giving Class Tests	Yes	10	59
	No	7	41
Doing Corrections	Yes	8	47
	No	9	53
Approachable	Yes	13	76
	No	4	24
Varying Teaching Methods	Yes	11	65
	No	6	35
Class Management	Yes	14	82
	No	3	18
Motivating Students	Yes	4	24
	No	13	76

From the table above, some physics teachers lacks certain teacher aspects whilst others they do have, for example; 82% of the respondents indicated that many teachers are able to manage their classes accordingly and 76% of the respondents indicated that many teachers fails to motivate their students. [11] articulated that most unqualified teachers lack the aspects that can be used in the course of instruction. Appendix 1 shows that the majority of the teachers are unqualified and this may be the reason why they are lacking these teaching aspects. An effective instruction calls for the presence of these teacher aspects hence qualified teachers have most of those skills.

The overall pass rate (see figure 2) of students is lower in schools having unqualified physics teachers; this is so due to the lack of afore mentioned teaching aspects and skills in the teachers. A qualified teacher is able to use differentiated instruction to accommodate all the learners in a class, thereby raising the pass rate. This is in line with what was reported in literature that teachers' professional standards make explicit the role of the teacher as a change agent who leads learning process [23].

➢ *Teacher's Qualification and Students' Performance*

The respondents (physics teachers and head teachers) were asked whether teacher's qualification contributes either to good or poor performance of students in Physics and the response is presented in the graph below:

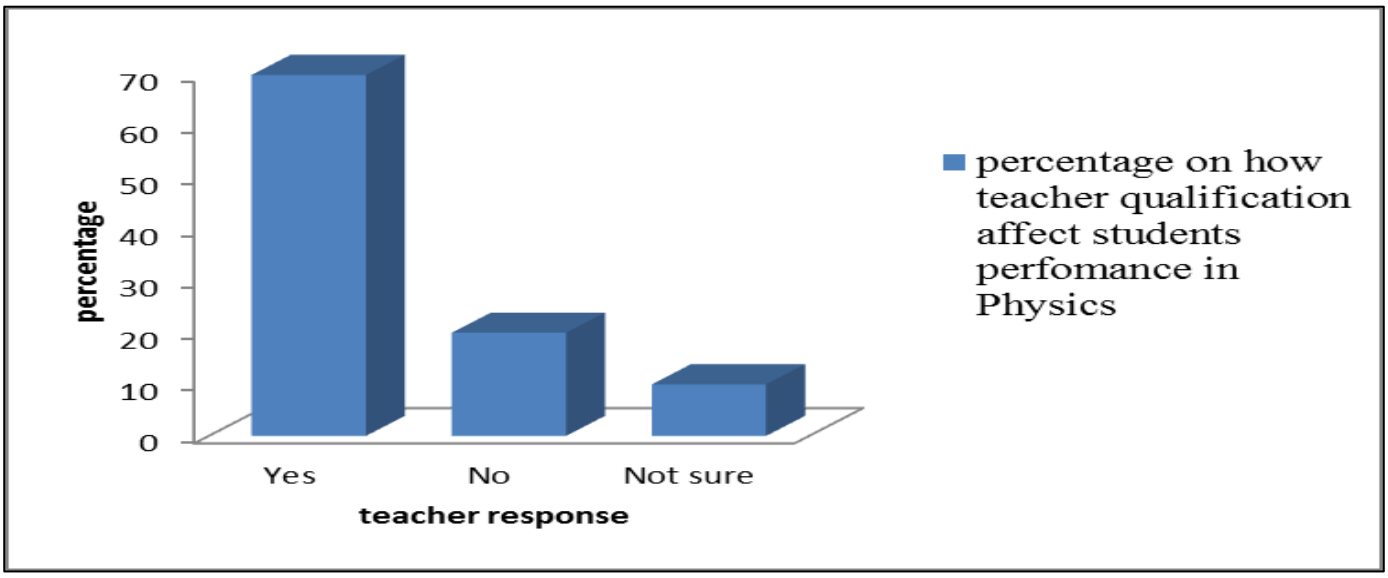

Fig 3 Shows the Way Physics Teachers' Qualification Affects Students' Performance

According to the graph, majority (70%) of the teachers agreed that teachers' qualification largely, affect students' performance while minority (20%) disagreed and 10% were not sure. This is in agreement with Olarewaju (2000) who submitted that students' low performance in Physics is due to the teachers' inability to do his or her role at a required time. Adeniyi (1993) also supported the findings when he observed that the manpower development is a function of qualified teachers.

In addition to above responses, some teachers responded to say that:

"……..Teachers' qualification entails the level of competence and the skills a teacher possesses which helps him to effectively deliver the content and consequently impacts students' performance….."

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"….Unqualified physics teachers fail to deliver the content to the students in a suitable manner such that a student can understand hence the students aren't able to perform during national exams…."

Teaching qualification is here found to be one of the major contributing factors that affect pass rate in physics. This finding is an indication that despite having well-equipped laboratories in schools, unqualified physics teachers lack the prerequisite skills needed in teaching physics. This is in line with the observation made by [31] that physics teachers need to apply specific abilities and skills without which their influence may not be reflected in their students' performance in the subject. For students to be able to make connection between what was taught in school and its application in problem solving in real life, the teacher has to be effective and adequate in their teaching

V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

➢ *Introduction*

The purpose of this chapter is to present a summary of research findings of the study, conclusions drawn from the study and recommendations. Finally, the chapter ends with areas for further studies.

➢ *Summary*

The data shows that there are few qualified physics teachers in the cluster with some schools not having even one. Most teaching skills such as a good variety of teaching methodologies were lacking in these teachers as they have not undergone proper trainings and have no proper qualifications. In contrast, a good variety of teaching and learning methodologies were found to be used in schools having more qualified physics teachers.

The trend in the cluster shows that where there were more qualified physics teachers, the overall students' performance was high as well. This reveals to us that academic performance is directly relying on how the schools are making a good use of the qualified teachers and how the qualified teachers are making a good use of the skills acquired when doing their respective trainings. The data also shows that professional teachers affect the students' performance positively more than the unprofessional teachers. The professional teachers' background training in education is the bane behind this clear cut difference.

➢ *Conclusion*

From the findings of the study, it can be concluded that physics teachers who are not qualified do not possess all the capabilities and skills that an imparter of knowledge needs to have. These skills and capabilities include classroom management skills, varying teaching methods, voice projection, lesson preparation, assessment skills, stimulus variation and being approachable. The study has shown that lacking those skills leads to presentation of content in a disorderly and inconsistent manner hence students are unable to grasp what the teacher wants to communicate hence at the end they perform poorly during exams.

There is a significant difference between the performance of physics students taught by qualified teachers and those taught by unqualified teachers. This is due to the fact that a qualified physics teacher can translate knowledge, skills, attitudes and values in accordance with certain professional principles. A qualified physics teacher has a good classroom control, effective communication skills, adequate knowledge of the subject and can utilize varieties of teaching strategies in order to enhance students' performance.

In general the study has shown that unqualified physics teachers do not teach well because they are not trained to teach physics and this therefore leads to poor performance of students.

Therefore teachers' qualification has a greater impact towards the students' academic performance.

➢ *Implications of the Findings*

- In - service training is of paramount important to teachers so that they are equipped with current and updated knowledge
- Whatever the student learn and how he or she was taught will ultimately determine the academic performance
- Schools lack qualified physics teachers, if the government recruits more qualified physics teachers, poor performance will be eliminated

➢ *Recommendations*

- As a matter of policy, the ministry of education should ensure that they hire the services of qualified physics teachers. This is so due to their capability to deliver and perform as expected. Their service contributes to positive progress of education standard here in Malawi as witnessed in this research
- The government should introduce conferences, seminars, workshops, and in-service training programs to those who have been fully trained. This will act as refresher courses they will be able to update them on the new development in the education sector. Even experts only remain relevant when kept updated on the new development. Education is dynamic hence practitioners needs to be dynamic as well to keep to its pace. There are many emerging issues in current world which can only be assimilated to our personnel through in service courses.
- Government should encourage/motivate the professional teachers especially in Physics through incentives and worthwhile science allowance.

➢ *Areas for Further Studies*

Further research can be done on:

- Examine the factors that contributes to the shortage of qualified physics and other science teachers in the Nkhotakota district and other similar regions.
- Evaluate the effectiveness of existing teacher training and certification programs

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APPENDICES

APPENDIX 1: DEMOGRAPHIC DATA FOR THE RESPONDENTS

Table 3 Demographic Data for the Respondents

Respondents	Frequency	Percentage
Sex		
Male	16	59
Female	11	41
Total	27	100
Age		
25 and below	17	63
25 – 35	4	15
35 and above	6	22
Academic level		
Students	17	63
Diploma holders	4	15
Degree holders	6	22
Total	27	100

APPENDIX 2: TEACHERS' QUESTIONNAIRE

My name is ***Mayeselo Makhenjera,*** a teacher and a researcher by profession; I am conducting a research and would like to collect your views on the impact of unqualified physics teachers on students' academic performance at this school. You are hereby requested to respond to each question. The information you will provide shall be treated strictly confidentially and is going to be used only for the purpose of this study.

Part A: Bio Data

1. Date:_____
2. Sex:_____
3. Age:_____
4. Name of school_____
5. Level of qualification (tick the appropriate option)
   ( ) Bachelor of education in science (physics) ( ) Diploma in education (physics)
   ( ) Bachelor of education (other subjects) ( ) Diploma in education (other subjects)
   ( ) Other
   (specify)_____
6. For how long have you been teaching
   1 – 3 years ( ) 4 – 6 years ( ) above 6 years ( )

Part B: General Information

1) Do you think teacher's qualification has an impact on students' academic performance?
[ ] yes [ ] no (Explain)
_____ 2)
Do you think teacher's experience has an impact on students' academic performance?
[ ] yes [ ] no (Explain)
_____

3) What is the impact of unqualified physics teachers on students' academic achievement?
_____

4) In your view as a Physics teacher, do the following teacher aspects affect a child's performance in physics? [use Not Effective (NE), Effective (E) and tick according to your choice]

No	Teacher Aspect	Ne	E
1	Teaching Methodology		
2	Lesson Planning and Evaluation		
3	Mastering of the Content		
4	Classroom Management		
5	Students Counseling		
6	Monitoring of Students		

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5) Do unqualified physics teachers possess the entire above mentioned teacher aspects? (Explain)

_____

END OF QUESTIONS
THANK YOU FOR PARTICIPATING

APPENDIX 3: HEAD TEACHERS' QUESTIONNAIRE

My name is ***Mayeselo Makhenjera,*** a teacher and a researcher by profession; I am conducting a research and would like to collect your views on the impact of unqualified physics teachers on students' academic performance at this school. You are hereby requested to respond to each question. The information you will provide will be treated strictly confidentially and is going to be used only for the purpose of this study.

Section A: Background Information

(Tick against your choice)

1 What is your sex Male ( ) female ( )

2 What is your age
Below 20 ( ) 20 – 30 ( ) 30 – 40 ( )
40 – 50 ( ) over 50 ( )

3 What are your academic and professional qualifications?
Diploma ( ) Bachelor's Degree ( )
Master's degree and above ( )

4 How many years have you worked as a head teacher
Below 5 ( ) 5 – 10 ( )
11 – 15 ( ) above 15 ( )

Section B: General Information

1. What is the average number of physics students at this school
_____
2. Does the school have enough qualified physics teachers (explain)
_____
3. Provide the school scholastic physics sheet for MANEB in the table below (for the past three years choose randomly, each year provide five of them, use A, B,….. for names)

No	Student Name	Performance in Physics (Grade)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

4. Rate the following statement and explain further with respect to your rating "students academic performance is affected by teacher qualification".
Strongly agree ( ) Agree ( ) Disagree ( ) Strongly disagree ( )
Explanation_____

END OF QUESTIONS

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APPENDIX 4: STUDENTS' QUESTIONNAIRE

My name is ***Mayeselo Makhenjera,*** a teacher and a researcher by profession; I am conducting a research and would like to collect your views on the impact of unqualified physics teachers on students' academic performance at this school. You are hereby requested to respond to each question. The information you will provide will be treated strictly confidentially and is going to be used only for the purpose of this study.

Section A: Background Information

1. Date :_____
2. Sex :_____
3. Name of school:_____
4. What is your age group (tick the right choice)
   10 – 14 ( ) 15 – 19 ( ) 20 – 24 ( ) 25 – 29 ( )

Section B: Teaching, Learning And School Activities

My Physics Teacher
Please provide the information in the table below by ticking against the column according to your answer

NO	ITEMS	YES	NO
1	Does your teacher give you class test frequently		
2	Does your teacher make corrections in every test		
3	Is your teacher approachable		
4	Does your teacher use different teaching methodologies		
5	Does your teacher manages the class well		
6	Does your teacher motivates you		
7	Does your teacher have positive attitude towards you		