IMPLEMENTATION STRATEGIES OF UNIVERSAL PRIMARY EDUCATION POLICY AND PUPILS' ACADEMIC PERFORMANCE IN AYIVUNI SUB-COUNTY ARUA DISTRICT, UGANDA

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A DISSERTATION SUBMITTED TO THE DIRECTORATE OF RESEARCH AND GRADUATE TRAINING IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTERS OF EDUCATION IN POLICY, PLANNING AND MANAGEMENT OF KYAMBOGO UNIVERSITY

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Declaration

I, Aleru Gloria declare that this dissertation titled "Implementation strategies of the Universal primary education policy and pupils' academic performance in Ayivuni sub-county Arua district," is my original work, which has never been submitted anywhere else for academic recognition.

Sign: .....

Date: 16/11/2022.....

Approval

This dissertation titled "Implementation strategies of the universal primary education policy and pupils' academic performance in Ayivuni sub-county, Arua district" has been prepared and produced under our supervision and submitted with our approval.

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Dedication

I dedicate this work to my cherished Late father Mr. Samson Ariaka, Late mother Mrs. Janet Fuambe, dear husband Mr. Cyril Adriko, all my children Geoffrey Adukule, Patrick Agani, Emmy Malisi, Bilton A. Aita, Liberty A. Alesi, Linda V. Onyiru, Lenient Alaru and Liz Healer. Not forgetting my sisters and brothers. For their encouragement, love, support and tolerance during my process of study**.**

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Abbreviations and Acronyms

DRC:	Democratic Republic of Congo
EFA:	Education For All.
FGDs:	Focus Group Discussions
MDG:	Millennium Development Goal
PGDE:	Postgraduate Diploma in Education
UN:	United Nations.
UNEB:	Uganda National Examinations Board
UNESCO:	United Nations Educational, Scientific and Cultural Organization
UPE:	Universal Primary Education

Abstract

The drive of this study was to establish the relationship between Implementation strategies of the Universal Primary Education policy and pupils' academic performance in Ayivuni sub-county, Arua district. This study was guided by the following objectives: to determine the relationship between improvement of physical school facilities and pupils' academic performance; to establish the relationship between the adequacy of instructional materials and pupils' academic performance; and to envestigate the relationship between training of teachers and pupils' academic performance. The study employed cross-sectional survey design, and both quantitative and qualitative research approaches were used. The study participants were 197: including seven head teachers, 63 teachers, and 127 pupils. Quantitative data were collected using a questionnaire, and qualitative data were obtained using interview, observation and Focused Group Discussion. Quantitative data were analysed using Pearson's correlation, and qualitative data were analysed using textural descriptions. The results showed a strong positive correlation ($r = .672$, $N = 66$, $p = 0.00$) between improvements in physical school facilities and pupils' academic performance. The findings also showed a high positive association ($r = .764$, $N = 66$, $p = 0.000$) between the quality of the instructional materials and students' academic achievement. Additionally, there was a statistically significant positive association between teachers' training and students' academic performance ($r = .660$, $N = 66$, $p = 0.000$). In conclusion, there is a correlation between the development of physical school facilities and students' academic performance, as well as between the quality of instructional materials and students' academic performance and the preparation of teachers.The study recommended that all UPE schools in Ayivuni sub-county should be supported with new classroom blocks as there is much congestion of pupils in classrooms, the government should consider providing more instructional materials like text books to pupils as the available textbooks were not enough. Additionally, the government should support in-service training to help all teachers acquire the necessary abilities to aid in enhancing students' performance.

CHAPTER ONE

INTRODUCTION

1.0 Overview

This study's goal was to determine whether the Universal Primary Education Policy's implementation and students' academic achievement in the Ayivuni sub-county of the Arua district were related in any way. The study's primary themes and concepts are introduced in this chapter. It also gives a framework for talking about the goals and research questions of the study.

1.1 Background of the study

This chapter also provides a background of the study. It follows a theoretical, historical, conceptual, and contextual framework.

1.1.1 Historical perspectives

Universal primary education was first established in Uganda as a result of the Millennium Development Goals. This goal was first acknowledged at the 1990 EFA world conference held in Thailand. The country was a signatory of the conference and committed to achieving this objective through a government whitepaper released in 1992 (Benavot, Resnik, Corrales, Benavot, & Resnik, 2006).

Despite the rapid expansion of the UPE Program, it has been acknowledged that the implementation of this objective has been a challenge in Sub-Saharan Africa. According to a report released by UNESCO in 2008, the various factors that affected the implementation of the program include the lack of resources and the unclear mechanisms that can help improve the academic performance of students (Sifuna, 2000)**.**

The 1999 Primary School Curriculum of Uganda clearly states what it is about. Its objectives and aims are also aligned with the National Education Policy Review Commission's (1992) recommendations. The curriculum was designed to address the objectives of the

government's education policy. It should ensure that all school efforts are geared toward achieving high academic performance.

In 1997, universal primary education was introduced in Uganda. Initially, it was supposed to provide four free education seats to every family's child. However, two years later, the president declared that all children in the country would be entitled to free education. According to Bukenya (2007), the program was established to cater to all primary school-aged children. The programme has registered a quite number of successes that include; increased enrollment, increased funding of infrastructural development, and teachers training since its inception. However, different challenges out compete the above-mentioned successes and these were; overcrowded classrooms, high pupil-teacher ratio, and high dropout rate especially among the girls, poor pupils' academic performance, low reading and mathematical ability (Aguti, 2002).

Ezienne highlighted in 2012 that the implementation of Universal Primary Education in Uganda has resulted in a decline in student academic performance. In January 1997, President Yoweri Kaguta Museveni launched the universal primary education program in the country. In response to the growing number of people wanting to access primary education, the commitment to universal primary education was extended. According to the Ministry of Education and Sports' policy document in 1998, it is the main tool for achieving the various goals of the country's education system (MES, 2003).

In other countries where UPE is considered, Kenya has ratified a number of international agreements and declarations pertaining to education. It is dedicated to ensuring that all its citizens have access to high-quality education (Olaleye, 2011). However, the weak administrative competencies in those systems are to blame for the low performance of the Kenya Universal Primary Education System and other developing countries (Motanya 2011). The head of the school is responsible for making sure that there is adequate personnel and

that teachers attend seminars and workshops to pick up new skills and teaching methods that will raise the standard of the educational system (Gikonyo, 2009).

In 2008, Nishimura and colleagues reported that the number of students in elementary schools in Ghana who were enrolled under the Universal Periodic Education (UPE) program had increased significantly. From 57 to about 85 percent, the gross enrollment in public primary schools ranged (Essama-Nssah., 2011). Over 8.2 million pupils have enrolled in public primary schools ten years following the program's introduction (Sewamala et al., 2011). The number of men and women enrolled in school increased by 19% and 23%, respectively, because more people are able to acquire education (Deininger, 2003). The success of the UPE policy placed significant quantitative constraints on Ghana's school facilities (Essama-Nssah., 2011). According to Sewamala et al (2011), the quality and levels of education in Ghana's public primary schools have remained subpar and are deteriorating despite advances in access to education. The UPE program continues to experience persistent and bothersome issues such high student-teacher ratios, repeated classes, low finishing rates, low literacy rates, and high school dropout rates (Sewamala et al., 2011). The program's inadequate number of classrooms and materials, which causes poor learning environments, is another disadvantage (Essama-Nssah et al., 2008).

In India, Govida et al (2007), found that there is still an issue with pupils' poor performance under the Universal Primary Education program (UPE). which is directly related to inadequate facilities, a non - accessibility of teaching and learning aids, absenteeism, which causes pupils to stagnate and fall behind in their learning of content and knowledge, pupils arriving late to school, and the qualities of instruction and knowledge in the classes. He stated that short-term hunger while at school and households' failure to feed children who attend school are reported to be strongly associated with students' substandard academic

attainment. Many students are expected to fail in their studies if the situation continues. Their futures will be affected by their low levels of education (Govida et al 2007).

However, ever since the introduction of current education, there has been concern over students' academic achievement in schools. Many nations have come to the conclusion that the most crucial element in the growth of educational institutions is the achievement of the students. Without their good performance, the innovations in education will fail. “Education quality” has been expressed primarily within academic success during national examinations set for each level by many countries. Setting objectives that are then put into practice in the curriculum and teachers' manuals is the aim of all educational systems worldwide. The national exams are then used to gauge if these objectives have been attained (Mutuku. 2013). Therefore, the best indicator of academic performance is the marks scored in the national examinations. When pupils who sit for a national Primary Living Examination (PLE) perform well, it is concluded that the country has a high-quality education (Samoff, 2007). This study's goal was to determine the variables that affect kids' academic performance in Ayivuni as well as the tactics used to administer the universal primary education program.

1.1.2 Theoretical background

The study was conducted under the supervision of systems theory by Gerard Bertalanffy in 1968. According to him, this discipline is focused on the study of structures that are interrelated and interdependent. It involves identifying the factors that influence the system's behavior. One aspect of a system can affect the other sections. The degree of adaptability and the rate of learning for systems depend on how well the system interacts with its environment (Bertalanffy, 1968).

The concept of a system approach states that an organization is composed of parts that interact with each other to achieve its goals. The elements that interact with the environment are then used to transform or produce outputs that are then sent to the atmosphere outside.

Inputs, outputs, and processes should be the minimum number of components in a system (Bertalanffy, 1968). Regarding this investigation of the academic performance of pupils in Ayivuni subcounty, the researcher while using this theory expects that each primary school in Ayivuni sub-county, during the application of UPE policy has inputs which consist of physical school facilities, instructional materials, training and re-retraining of teachers which interact through processes like instruction and knowledge in each school to produce good pupils' academic performance in primary schools, which was the output. Therefore, it was crucial to determine how these inputs related to students' academic performance in the Ayivuni sub-county in this study.

1.1.3 Conceptual background

According to the Education Act of 2008, all children are entitled to a high-quality, reasonably priced education through the government-funded program known as universal primary education. The fundamental goal of this program is to guarantee that every child has equal access to a thorough and pertinent education. UPE, according to Mfreke (2016), is the total number of students enrolled in a school that are currently enrolled in school. Implementation tactics were included in the Education Act of 2008 The term "universal primary education policy" refers to a comprehensive strategy for achieving universal primary education in Uganda, which involves upgrading the physical school infrastructure, providing educational supplies, and educating teachers to uphold the free education. While Etsey (2005) noted that UPE policy implementation involves ensuring that every child enters and completes primary school, thereby reducing inequities in educational process and eventually reducing poverty. While in the context of this study, UPE policy implementation strategies entail enhancing

physical school facilities, providing instructional materials, and training of teachers. Grogan (2006) observed that, academic performance is the achievement of pupils' excellence in relation to high grades in internal and external examinations and this casts a duty on the learner aiming to realize the educational aims and goals. On the other hand, Mahulo (2012) "academic performance refers to the degree to which a student, teacher, or institution has attained their goals". The achievements of students at various educational levels, such as primary, secondary, and bachelor's degrees, are considered milestones. According to a study conducted by Kapur (2018), various factors affect a student's academic performance, such as class participation, home-work assignments, and tests. For the purpose of helping students accomplish their learning goals and objectives, the researcher considered academic performance to be the overall excellence of students as measured by high, average, and low grades in internal and external examinations. As for this research, pupils' academic performance was operationalized as Grades attained in Primary Leaving Examinations (PLE).

1.1.4 Contextual Background

This study was carried out in Ayivuni Sub-County, which has schools in both urban and rural settings. Arua district had set measures to improve pupils' academic performance that include: constructing more classrooms, recruiting more teachers, frequent inspections, but still pupils continue to perform poorly compared to private schools (Agaba 2019). According to UNESCO (2011), Uganda has experienced a consistent deterioration in performance in the majority of primary schools since the implementation of UPE. Despite the various achievements of Uganda's students, it is still struggling to meet the MDGs by 2015. The establishment of universal primary education by the Ugandan government is definitely a notable step in the direction of ensuring education for all. However, attaining quality education still poses a challenge that needed to be addressed so as to sustain national development UNESCO (2011).

The introduction of the Universal Primary Education (UPE) program has resulted in a number of beneficial developments, according to the MDG 2015 Report. Among them is the diminution of gender disparities in the completion rate of schools. Despite these achievements, the efficiency of the country's primary education system is still low. The survival rate of primary schools is at 32.1%, while the repetition rate is at 10.2% (NPA, 2015).

In terms of academic performance, the schools that are under UPE continue to lag behind. Out of the 749,761 candidates who sat for PLE in 2021, over 700,000 were not from UPE schools. The country registered a failure of 64,487 candidates that is (12%) of the total number who sat from UPE schools, compared to 10,391 candidates that is (4.5 per cent) who failed in the private primary schools (New Vision, July 17, 2021).

Based on everything mentioned above, the researcher expressed interest in determining the link between Ayivuni sub-county students' academic performance and implementation techniques for the universal primary education policy.

1.2 Statement of the Problem

The implementation of the Universal Primary Education Policy has been a resounding success. It has resulted in various notable achievements such as increasing enrolment, improving literacy levels, and introducing more effective teachers.

However, there has been a lot of criticism about the academic performance of pupils. According to Mugerwa (2016), Public schools in Uganda continue to offer mediocre and deteriorating education. Despite the various improvements that have been made in the access to education, the program still faces many challenges. Some of these include the high school dropout rate, low completion rates, and low levels of teacher and pupil education UWEZO, (2018) out of the 2,400 schools surveyed nationwide, 9 out of 10 or 92% of P3 students could

not read a story text at the P2 English level, and only 1 out of 5 P3 students could not even recognize the letters of the English alphabet, according to the report. Materials written at primary three levels were incomprehensible to children in primary six. According to the poll, 17% of P7 pupils were unable to read and comprehend an English story text at the P2 class level.

Primary leaving examination (PLE) statistics for the Arua district show that only 2.4% of students passed in division one in 2003, compared to 12.6% of students who passed in division one prior to the adoption of UPE in 1996. (Education Office Report of 2003). 2014 PLE result indicates that out of 8491 candidates who sat, 136 obtained division one which represents 1.6% (Daily monitor Jan. 15.2015). Not even one name of a school under Universal Primary Education in the Arua district appeared in the 2017 PLE results national list of the top 1000 performing schools in Uganda. 2018 PLE result shows that 3.2% candidates obtained division one, ranked number 94th out of 127 districts in Uganda (The observer National news 2019). All these indicate poor performance. It is unclear whether this could have resulted from matters connected to UPE implementation in relation to physical school facilities, instructional materials, training of teachers. A study was required to determine the relationship between student academic achievement in the Ayivuni sub-county of Arua and the strategies used to deliver universal primary education.

1.3 Purpose of the Study

The goal of this study was to ascertain how the universal primary education policy's implementation tactics related to the academic performance of students in the Ayivuni sub-county of the Arua district.

1.4 Objectives of the Study

The objectives of the study included:

i) To establish the relationship between improvement of the physical school facilities and pupils' academic performance in Ayivuni sub-county.

ii) To establish the relationship between the adequacy of instructional materials and pupils' academic performance in Ayivuni sub-county.

iii) To establish the relationship between training for teachers and pupils' academic performance in Ayivuni sub-county.

1.5 Research Questions

i) What is the relationship between improvement of physical school facilities and pupils' academic performance in Ayivuni sub-county?

ii) What is the relationship between adequacy of instructional materials and pupils' academic performance in Ayivuni sub-county?

iii) What is the relationship between training of teachers and pupils' academic performance in Ayivuni sub-county?

1.6 Research Hypotheses

i) There is a statistically significant relationship between improvement of physical school facilities and pupils' academic performance.

ii) There is a statistically significant relationship between the adequacy of instructional materials and pupils' academic performance.

iii) There is a statistically significant relationship between training of teachers and pupils' academic performance.

1.7 Scope of the Study

Under the following subheadings geographic scope, topic scope, and time scope—the study's scope will be described.

1.7.1 Geographical scope

Ayivuni Sub- County is situated in the western part of Arua district, which is in Northern Uganda Region of the country. Other districts bordering this region include Adjumani, Amuru, Nebbi, Zombo, and Maracha. The Democratic Republic of Congo's (DRC) Maracha District is to the northwest. The Arua district headquarters is located about 425 kilometers away from the capital, which is in Uganda's largest city, and is northwest of the country's largest city, also known as Kampala. Most of the activities that were carried out in this area during 2019 were done when it was a district.

1.7.2 Content Scope

This study was conducted to establish a link between the implementation of the universal primary education program and the academic performance of students in the Ayivuni subcounties of Arua District. There are various independent variables such as the training of teachers, physical school facilities, and instructional materials. The pupils' academic performance is also influenced by the PLE grades.

1.7.3 Time Scope

The objective of the study was to analyze how the implementation of the universal primary education program affected the academic performance of students in Ayivuni sub-counties from 2010 to 2019. This would give the researcher the opportunity to compare pupils' performance between the time before and after the implementation of universal primary education.

1.8 Significance of the Study

Policymakers will use the study's findings to address some issues that will arise from administering the UPE policy's initiatives in primary schools, to review the policy and enforce guidelines aimed at promoting education quality.

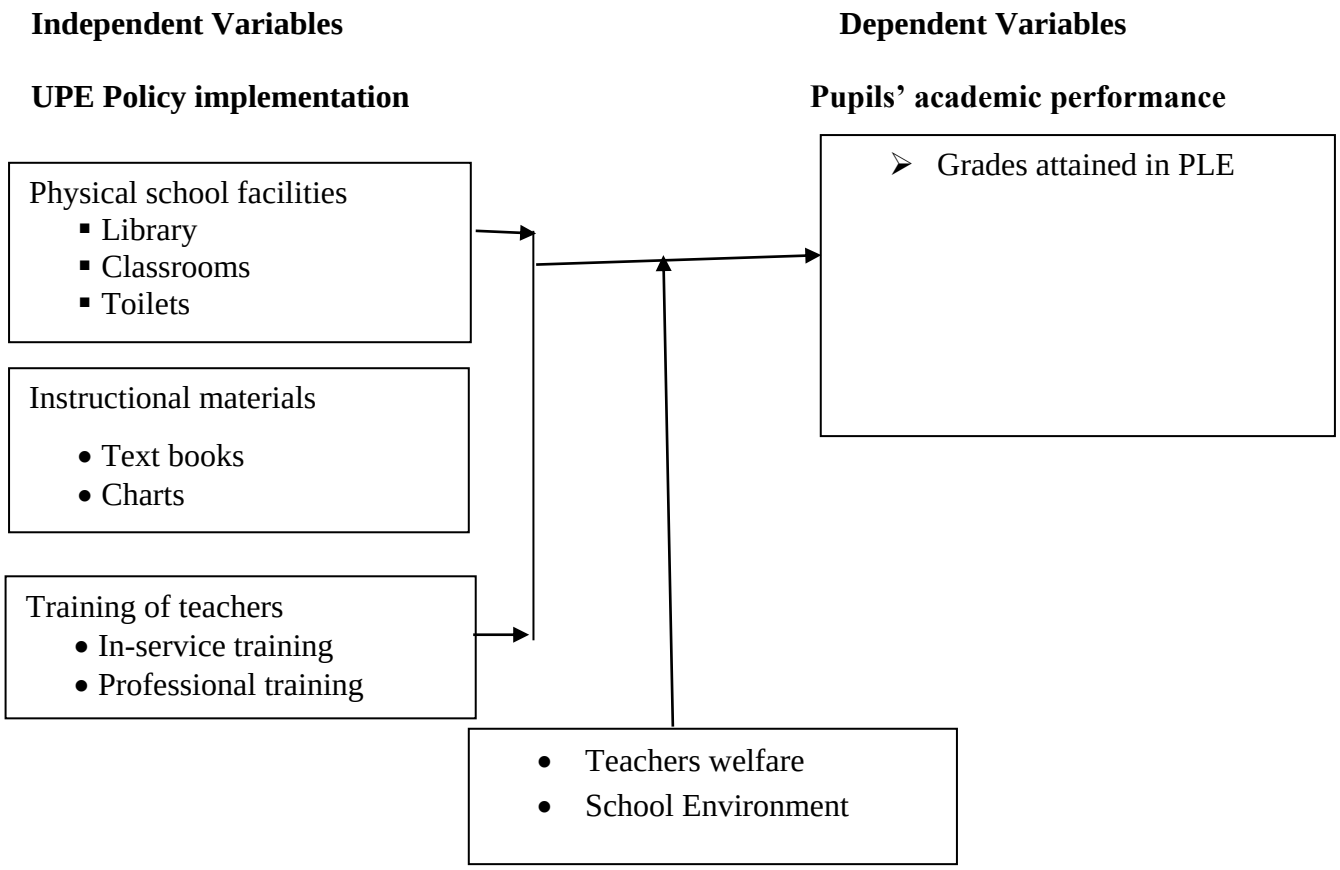
The study's recommendations and proposals will be used by the Ministry of Education and Sports to address the academic performance crisis that has affected the students in Ayivuni and other areas.

Future scholars, academicians and researchers will utilize the study results as reference for research in field of learners' academic success and education quality improvement.

The study's findings and recommendations are expected to contribute to the development of a comprehensive understanding of the various factors that affect the academic performance of students in Ayivuni sub-countie. Scholars and academicians can use the study as a basis for their research.

1.9 Conceptual Frame Work

The study's conceptual framework shows the relationship between the implementation of the Universal Education Policy (UPE) and the academic performance of students in Ayivuni sub-counties.



Source: Adalikwu and Iorkpilgh (2013).

The conceptual model includes independent and dependent variables that show how the implementation strategies of universal primary education policy and pupils' academic performance in Ayivuni sub-county are related. Independent variables are casual factors that are used to foresee the value of the dependent variables, these include: Improvement of physical school facilities, adequacy of instructional materials and training of teachers. While dependent variable which is academic performance was measured in form of grades attained in PLE.

Accessibility of physical school facilities like class rooms, libraries and toilets creates a favorable environment for pupils learning through reducing congestion in classroom and wastage of time as pupils wait to access the toilets due to few stances in schools, thereby leading to better grades in PLE. Availability of instructional materials like text books, charts

helps pupils and teachers to access more content regarding their subjects of study thereby leading to better grades. Training of teachers equips them with facts on the different teaching methodologies which improves their skills in teaching pupils leading to improved academic performance.

1.10 Definition of key terms

i). Universal primary education: refers to a state-funded education program where the government pays the tuition costs and the idea of equal access to affordable, high-quality education is promoted for all children, regardless of their gender, race, or ability.

ii). Universal primary education policy implementation: refers to putting into practice the specified policy initiatives, including teacher training, the provision of educational resources, and the construction of physical school facilities to maintain the free education.

iii) Academic Performance: Teachers judge students' performance in school assessments based on the results of the tests, examinations, or assessments they take. As a result, when grades are given, students' performances are determined to be high, average, or low.

iv). Primary Living Examination (PLE): An examination set by Uganda National Examinations Board (UNEB) for primary seven candidates. Students' entrance into secondary education is determined by how well they pass on these exams. Performance will be measured in terms of grades obtained by pupils in PLE exams, pupils who obtain first, second and third grades are considered to have performed better, they upgrade to secondary education.

v). Instructional materials: These are necessities for the class, including textbooks, workbooks, chalk, teaching aids, and other things that instructors use to impart subject matter to students.

vi). Improvement of physical school facilities: Aside from the establishment of a physical school facility, other structures such as classrooms and laboratories are also needed to operate the school**.**

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter encompasses available literature on the relationship between improvements of physical school facilities, adequacy of instructional materials, training of teachers and pupils' academic performance as viewed by other scholars globally, regionally and nationally.

2.1 Theoretical Review

The systems theory of Bertalanffy, which was released in 1968, had an impact on the work. According to him, this concept is about the study of systems that are interconnected and can be naturally or artificially created. An entire system or other sections of it may be impacted by changing one part. This is due to the fact that certain systems maintain other systems in order to keep them from failing. The degree of growth and adaptation for systems that learn and adapt depends on how well the system interacts with its environment. The concept of a system approach states that an organization is made up of parts that interact with each other to achieve its goals. The interacting elements collect and transform information from the environment, produce outputs, and discharge them to the external environment. In order to have a functional system, it must have at least three elements: inputs, processes, and output.

As for the case of this study on the strategies for implementing the universal primary education policy and students' academic performance in the Ayivuni sub-county, the researcher, using this theory, anticipates that each primary school, when the UPE policy was being put into place, has inputs consisting of physical school facilities, instructional materials, and training of teachers which interact through processes like instruction and knowledge acquisition in each school to produce good pupils' academic performance, which

is the output. Therefore, it was crucial to learn from this study how these inputs related to pupils' academic performance in the Ayivuni sub-county.

Weaknesses of Systems theory

One of the weaknesses of systems theory is that the approach does not allow easy explanation of present circumstances of personal issues. For instance, an additional traditional psychological method may be required for a high brain problems that needs unique attention or prescription (Balogun, 1982).

Another weakness of the systems theory is that drawing actionable conclusions based on what is on ground. One may identify the problems which is important, but finding solutions to these problems becomes difficult, because different parts interacted to cause that problem at hand. For example, it may be difficult for a teacher to identify the main cause for a learner to perform poor all the time because there are several things that contribute to educating a child. (Olaniyan, and Ojo, 2008)

2.2 Improvement of physical school facilities and pupils' academic performance

Physical school facilities are the buildings required to run a school, such as classrooms, desks, seats, restrooms, playgrounds, and libraries which collectively significantly affect instruction and learning. The presence and usage of these resources create an enjoyable, highly motivating, and engaging learning atmosphere in the classroom, which draws more students into the educational system (murungi, 2012). Performance is a measure of educational output. Academic performance may be seen in an individual learners' ability to act and do a piece of work, and how perfectly or wrongly she does the work within a learning process. One is said to have performed poor when she has scored below the required standard (Adeyemi, 2008).

In current studies many scholars have highlighted the significance of the availability of physical school facilities. Aga Khan (2018) stressed how crucial it is to have easy access to these resources in order to effectively conduct instruction and supervise the learning process. That open classrooms with sufficient seating options, such as comfortable seats, desks, and tables, play a crucial role in the teaching and learning process and help schools run smoothly, leading to increased academic success.

Mfreke (2016) conducted an ex-post facto survey study to investigate the connection between teachers' utilization of school resources and student nurses' success in Human Biology courses at nursing schools in Akwa Ibom State, Nigeria. The results of the study revealed that the use of school facilities such as the library, recreation center, and lab was associated with the academic success of nursing students. Mfreke (2016) noted three things in the study; one was for the facilities to be availed to schools, another thing for them to be in a good condition, next thing was for them to be properly utilized to serve the purpose for which they are made to be available. The previous study looked into the exploitation of school facilities by teachers, while the current one focused on the improvement of school facilities and pupils' academic performance. This research has a hole that needs to be filled.

At public secondary schools in south-west Nigeria, Ekundayo, Haastrup, and Timilehin (2012) utilized a descriptive survey research approach to look into the relationship between school facilities and students' success in the emotional and psychomotor learning domains. The study's findings demonstrated a significant association between educational facilities and students' performance in the affective and motor domains. On the other hand, Too (2005) asserts that inadequate physical facilities in UPE schools continue to be a significant barrier to achieving overall success in government schools. Second, enrollment has caused school facilities to become overcrowded. Similar to the amount of teachers, there haven't been

enough classrooms to accommodate the growing number of students. The shortage of desks, chairs forces learners to congest themselves onto the few benches. This makes the learning uncomfortable, encouraging learners to become unfocused. The study was carried out in Nigeria, but for the present study, the researcher was interested in finding out how UPE's implementation in the Ayivuni sub-county has affected pupils' academic performance.

According to Uwezo, (2018), Primary 3–7 students' ability to read and comprehend a basic Primary 2 level tale fell from 39% in 2015 to 33% in 2018, while their proficiency with P2 division fell from 52% to 45%. (Uwezo 2019). Uwezo's proof of the ongoing "learning crisis," along with evidence from other assessment systems, has been an effective foundation for advocating for a change in policy. Education policy in East Africa and around the world is currently more concerned with learning outcomes as an indicator of success than enrollments. The study focused on the implementation of the Universal Education Policy (UPE) in Ayivuni sub-counties. It also looked into the factors that affected the students' academic performance.

The study conducted in Lagos State by Adaramaja, Adeyemi, and Ahmodu (2018) looked into the relationship between the educational facilities and the academic performance of students in the local government area's secondary schools. According to the study, academic achievement among students and the caliber of school infrastructure were both relatively high over the course of the study period. The study also found a strong link between students' academic achievement and the structure of the school and its components. On the other hand, (McGrowen, 2007) observed that the presence of those facilities determines the caliber of instruction and academic achievement of students in the school. These facilities are the vital materials that must be available and taken into consideration so that the drives of school systems can be realized. However, there is no literature about facilities which were introduced during UPE implementation in Ayivuni sub-county, intended to cause improved

quality of instructions in primary schools. This prompted the researcher discover the facilities that have been introduced by UPE implementers to cause improved quality of instructions.

In their 2017 case study, Ashrof and Fattinbinti looked at the school infrastructure in secondary schools in Klang, Malaysia, with the goal of enhancing students' academic performance. According to the study's findings, students who had access to better physical facilities performed better on exams and during learning activities. Physical amenities such classrooms, labs, libraries, rest rooms, landscapes, and health facilities enhance students' academic achievement in addition to making learning activities in class or school more interesting, inspiring, and practical for both students and teachers. Even though this examination was conducted at secondary schools, the researcher in the current study was interested in the public primary schools in the Ayivuni sub-county.

School infrastructure, according to UNESCO reports from 2005, is essential to providing top-notch services to students. The advent of free elementary education in Kenya is favorable to the nation's infrastructure. Not much has been done to ensure that there is room for additional students to enter. Although there are many students enrolled in Kenya's free elementary schools, there is not enough infrastructure to provide these students with the high-quality education they require. In a similar vein, Alubisia (2005) emphasized that among the difficulties faced by primary school students in Sub-Saharan Africa are overcrowded classrooms, a lack of textbooks, insufficiently qualified teachers, and a lack of restrooms where boys and girls are not allowed to use separate facilities. The impact of the same circumstance on the quality of instruction in elementary schools in the Ayivuni sub-county is being investigated by the researcher.

In the Nigerian state of Bauchi, Umar and Igbaji conducted study on the effects of educational amenities on students' academic progress in 2017. According to the results, there

was no statistically significant correlation between student academic achievement and the institution's physical characteristics. Only 84 principals made up the smaller samples used in the prior study. This posed potential statistical flaws and restricted the generalizability of the findings. The current study comprised a bigger sample of 157 service users, including head teachers, teachers, and students in primary seven in order to fill in the gaps from the earlier study.

2.3 Adequacy of instructional materials and pupils' academic performance

Non-printed and printed instructional materials are used to deliver information to students in the learning process. Some of these include textbooks, magazines, newspapers, and videos. These materials help boost the students' memory and improve their learning. Although studies have shown that instructional materials can help improve student achievement, they have not examined the link between these materials and academic performance. To raise the standard of education in Uganda, research must be done on this crucial topic.

Academic accomplishment and instructional resources have a significant relationship, according to Aga Khan research from 2016. Academic performance was higher in schools with greater instructional resources than in schools with fewer resources. Academic achievement was higher in private schools than in public ones due to the quantity and quality of their resources for teaching and learning. They observed a low level of instructional resources in government primary schools and concluded that there was a severe shortage of teaching resources in public schools. He continued by saying that for real teaching and learning to occur in the classroom context, it is necessary for the essential teaching resources to be present.

According to a study done in 2013 by Iorkpilgh and Adalikwu, the academic performance of pupils in a state secondary school in Cross River was strongly impacted by the use of

instructional materials in the teaching of chemistry. The results indicated that students who received teaching utilizing instructional technologies performed better than those who did not. They stated that using instructional aids generally enhances students' conceptual understanding and results in increased academic performance. The study, which was conducted through a quasi-experimental approach, looked into the effects of various teaching aids and instructional materials on the academic performance of students in the chemistry department. The researcher used a cross-sectional research design to examine pupils' performance in all subjects covered at the primary level in the Ayivuni sub-county along with other teaching and learning resources in an effort to close methodological and contextual gaps.

Etsey (2005) conducted research on the factors contributing to elementary schools in Ghana's Shama Ahanta East Metropolitan Assembly's Shama Sub-poor Metro's academic performance. The study acknowledged that factors contributing to poor performance included: inadequate school infrastructure, small class sizes, infrequent teacher in-service training, teacher absenteeism and tardiness, which affected students' motivation and commitment to learn, and teacher absenteeism and tardiness. The effectiveness of the study materials and academic success weren't examined. It was investigated how the instructional materials and students' academic performance related.

The study conducted by Adeogun in 2001 focused on the adequacy of learning materials in public colleges in the state of Legos. He discovered that students' academic achievement was positively affected by the instructional resources they had access to. He also found that schools with more gifted teachers and materials were more successful than those with less gifted teachers. Adeogun (2001) went on to say that because they supplement, complement, and intensify instructors' efforts, learning resources improve their efficacy in the classroom.

While the research was primarily concerned with the quality assurance of learning materials in public colleges of education in the state of Legos, the researcher also wanted to investigate the connection between adequate instructional materials and students' academic performance in the Ayivuni sub-county.

Olayinka (2016) carried out a study to highlight how instructional materials effect secondary school students' academic performance in Social Studies in the state of Ekiti. The study found that students who received training utilizing instructional materials performed better than those who did not. The academic achievement of pupils is increased, in accordance with Olayinka (2016), when teachers improvise when and where the materials are available and apply fundamental instructional techniques. The previous study solely looked at how instructional materials affected the academic achievement of secondary school students in Social Studies; the current study demonstrated a link between the adequacy of instructional materials and students' overall academic performance in the Ayivuni sub-county.

Raheem (2014) noted that learning resources are used by teachers to facilitate explanations and make work simpler for students during the teaching-learning process. According to Abdu-Raheem (2011), a lack of learning aids contributes to ineffective classroom instruction. The majority of secondary schools in Nigeria, according to Ahmed (2003), lack the ideal setting and fundamental educational resources needed for efficient teaching and learning. Aniayewu (2005) made the claim that the usage of instructional materials is essential for efficient instruction and learning in order to help pupils grasp concepts and acquire more knowledge in order to advance academic values in science-related topics in schools. Additionally, Enaigbe (2009) pointed out that a lack of fundamental teaching resources like textbooks, chalkboards, and essential technology like computers, projectors, televisions, etc. in many schools results in subpar academic achievement. But the current research was

interested in establishing how adequacy of instructional materials relates to pupils' academic performance in Ayivuni sub-county.

According to Olumorin, Yusuf, Ajidagba, and Jekayinla's (2010) research, instructional materials assist both teachers and students in learning efficiently. They believed that when educational materials are used, there is a direct relationship with the sense organs. The importance of instructional materials as instruments for teaching and learning was reinforced by Kochhar (2012). In order to extend concepts and instill a passion of the subject in students, he recommended that teachers use essential learning materials to supplement what is gained from textbooks during the teaching and learning process.

The benefits of learning materials, according to Abolade (2009), include lower production costs, the ability to teach a large group of pupils at once, and a rise in interest and attention. The utilization of instructional materials by teachers and the provision of hands-on activities during the teaching and learning process, however, makes learning more engaging, consistent, and realistic, according to Akinleye (2010). Learning resources are crucial equipment for engaging teaching and learning activities (Esu, Enukoha, and Umoren 2004). Conversely, Ekpo (2004) opined that instructional materials are vital in helping the sense organs. Compared to the current study, which was conducted in Uganda, the former was conducted in Nigeria.

Abdu-Raheem (2014) stated that learning materials are vital instruments that make teaching additionally practical and easily understood by the learners, all these are lacking in Nigerian secondary schools. This causes learners to do poorly in both internal and external exams. Abdu-Reheem (2014) fortified the use of instructional materials by teachers during teaching because it encourages pupils' active involvement during teaching and learning process, gives chances for incidental learning, problem solving, debate as well as interpretation of subjects

and concepts within learners and their teachers. Afolabi and Adeleke (2010) recognized the reasons as to why teachers use poor methods of teaching such as lecture and explanation during mathematics periods as being lack of, insufficient and non-use of instructional materials. Afolabi and Adeleke (2010) suggested that all the stakeholders like the teachers, parents, government and donors must increase interest in providing schools with more learning resources for the teachers to use in teaching mathematics. This study was primarily interested in how well students performed in mathematics, whereas the current study examined how well pupils performed in every subject they studied at the primary level in Ayivuni sub-county.

2.4 Training of teachers and pupils' academic performance

The goal of the program was to provide teachers with the necessary skills and attitudes to carry out their duties effectively. These include training in the areas of teaching and learning. A training is a process to acquire the abilities needed for a specific subject. The training is recognized as a highly effective way to improve teaching abilities. A skilled teacher with expanded talents and approaches should be used for pupils' greater academic performance (Ulla, 2018).

A teacher with superior teaching skills can also raise students' interest in a particular subject (Giovazolias et al., 2019). Today's educational activities, such as the development of a conducive learning environment, the implementation of curricula, and assessment, all depend on the training of teachers, which is a critical precursor and essential component (Zulfiqar, 2016). A skilled teacher is better able to instruct students and employ a variety of teaching methods with effectiveness (Saira et al., 2021). When teachers adapt their teaching techniques to the students' gained skills, students achieve greater academic results and their attention is also increased (Wuryaningsih et al., 2019).

In mixed-gender public secondary schools in Gem District, Kenya, Mahulo (2012) looked into how teacher preparation affects pupils' academic achievement. The study discovered that teacher preparation has a significant impact on student achievement. They discovered that students at mixed public secondary schools who were taught by trained instructors performed considerably better on the KCSE in the subjects of mathematics, English, and Kiswahili than those who were taught by inexperienced colleagues. He established that a well-trained teacher effectively and professionally conveys the subject material, and he further added that such a well-trained teacher can better deal with other factors like the environment, the economy, and society and culture, which also affect students' performance in exams. In addition to analyzing and incorporating the environmental factors into class activities, teachers can also make use of these tools to improve their students' performance. In a study conducted in Ayivuni sub-counties of Nigeria, the researchers tried to determine if the teachers' qualifications were the cause of the poor performance.

Oshinyadi, Ogunbakin, and Ogunbakin (2016) conducted a study with a total of 25 instructors and 1,250 students sampled in 20 schools to ascertain the impacts of teacher preparation and professional development on students' academic performance in senior secondary schools in Ogun State, Nigeria. The findings showed that teacher preparation and student academic performance had a positive association. Teacher professional development and student academic achievement also had a significant impact on kids' academic performance ratings. They found that professors with at least a postgraduate diploma in education (PGDE) have the greatest influence on students' academic success. In senior secondary schools in Nigeria, a study examined the impact of teacher preparation and professional development on students' academic achievement; the current study found a connection between teacher preparation and student academic performance in Uganda's Ayivuni sub-county. They discovered that academic success of students is most strongly

influenced by teachers who have at least a postgraduate diploma in education (PGDE). The current study discovered a link between teacher preparation and student academic performance in Uganda's Ayivuni sub-county. A previous study looked at the effects of teacher preparation and professional development on students' academic accomplishment in senior secondary schools in Nigeria.

In senior secondary schools, Suleiman, Hanafi, Thanslikan, and Abdulrasheed (2017) used the correlation survey method to examine the effect of teachers' capacity building on students' academic achievement in Mathematics, English, and Economics. They specifically examined whether the educational attainment of students was influenced by the training programs for instructors. The findings showed a strong correlation between teachers' workshops and students' academic success. This indicates that the workshop program gives teachers the intellectual capacity to impart relevant knowledge to the students in the classroom, positively affecting students' academic achievement. Their research centered on enhancing instructors' abilities to help children perform better academically in topics like arithmetic, English, and economics. The current researcher was likewise curious to find out more about the connection between teacher preparation programs and students' academic performance.

More than 1,000 math and science teachers around the country participated in a study that indicated that teachers who take part in training are more likely to adopt cutting-edge teaching techniques and exhibit rapid reactions. Therefore, it is likely that long-term, comprehensive training will increase teachers' knowledge and abilities, which will then boost student accomplishment (Porter, et al, 2001). The essential objective of teacher preparation, according to Guskey & Clifford (2003), is to improve student outcomes. Because they are more productive in the classroom, well-equipped and trained instructors have the strongest influence on student achievement.

According to Ashton & Crocker (2000), training improved student performance and accountability. The current study, which intended to understand the connection between teacher preparation and students' academic performqnce, included more respondents than the previous one, which only included secondary teachers. These respondents included head teachers, teachers, and the learners.

According to Essays, UK (2018), teacher training is crucial, particularly in the contemporary context to handle the profession's changing expectations. Training improves a teacher's knowledge of the curriculum and instructional techniques, which puts trained instructors in a superior position to educate the pupils than inexperienced ones. According to the National Staff Development Council (2003), teacher preparation supports the ideologies and teaching strategies that improve the dissemination of knowledge. In contrast, Morgan (2010) studied the benefits of professional development and found that it gives teachers more knowledge to help them present content when teaching. In the Ayivuni sub-county, this study sought to ascertain the relationship between teacher preparation programs and pupils' academic achievement.

Enamul, Mahabubul, and Kanesean (2010) found a strong impact of teachers' professional development activities, including training and retraining, on school development. They found that if schools prioritized teacher cooperation, in-service training, and classroom observation more, the best school development was feasible. And Bassey, Bassey, Ojua, and Ottong (2011) discovered a significant relationship between instructors' training and retraining and their efficacy as indicated by attendance, extracurricular activity involvement, timely submission of exam marks, and preparing extra lessons for students.

In Uganda's primary schools, a survey by Uwezo in 2015 revealed that 58% of the schools lacked trained teachers in first aid and 70% lacked teachers trained in special

needs education. Eastern and Northern Regions do not have enough classrooms and toilets. Aga Khan (2017), on the other hand, argued that boosting the educational standards of the country depends on teachers. They are essential in transferring cultures, traditions, attitudes, knowledge, and skills from one generation to the next. No system of education can be more sophisticated than its teachers, and the educational process contributes in reaching national objectives. Teachers with advanced degrees and impressive credentials have the power to transform society. However, there needs to be a deliberate effort made to create teachers with deep subject understanding. This difficulty can be overcome by providing teachers with structured, intensive training. The researcher conducted the study in Ayivuni sub-counties to investigate the link between the training of teachers and the academic performance of pupils.

2.5 Summary of the Literature Review

The researcher visited the works of other researchers such as: Mfreke (2016), Etsey (2005), Mahulo (2012), Olayinka (2016), Adalikwu and Iorkpilgh (2013) Arenstrop (2004); Adeogun (2001), Essays, UK (2018) and many others who conducted research on the variables of the research in other areas of the world and discovered a relationship but none of them were conducted in the Ayivuni sub-county. Generally, the studies above did not measure performance in relation to grades as proposed in the present research. Also not many studies have considered physical school facilities, adequacy of instructional materials and training of teachers as dependent variables. This study sought to ascertain whether there was a relationship between the execution of plans for universal primary schooling and the academic achievement of students in the Ayivun sub-county.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This section defines the researcher's methodology, which includes information on the specifics of the study's design, sampling procedures, data gathering and analysis, and more. The approaches employed as well as the data analysis and design process are presented.

3.1 Research Design

The researcher used a cross-sectional survey design because it makes it possible to gather data from a cross-section of the population. Cross-sectional studies are a type of observational research that look at data on variables collected at one specific time across a sample population or a pre-specified subgroup. The study also used qualitative and quantitative methodologies. The former was used because it involved drawing conclusions and descriptive statistics. The qualitative approach provided specific data in the format of statements from focus group discussions as a complement to the quantitative approach (Amin, 2005). The justification for using both approaches was that one method alone was not sufficient.

3.2 Target Population

The target population for the study was 265 respondents, as indicated in table 3.1. The survey was done in the Ayivuni sub-county, which had a total of 7 UPE schools, 72 teachers, 7 head teachers, and 186 Primary Seven students. Ayivuni sub-county was selected because it was one of the regions in the Arua district where student performance had declined following the implementation of Universal Primary Education (Agaba, 2019). Pupils were selected for the study because they are directly affected by the problem under study. While teachers and head teachers were selected because they are key stakeholders that influence the performance of students

3.2.1 Sample Size

Sampling is a method for selecting study participants to ensure that those picked are typical of the larger group from which they were selected (Mugenda and Mugenda 2003). For the study, the researcher picked all seven UPE primary schools in the Ayivuni sub-county. The sample size for the study was 157 individuals. The sample size chart developed by Krejcie and Morgan in 1970 was used to determine this. There are 125 students, 61 teachers, and 7 head teachers in this group, as stated in Table 3.1.

3.2.2 Sampling Technique

To determine the sample size from the schools in the Ayivuni sub-county, the study used standard random sampling procedures as well as purposive selection approaches. The researcher was able to select study participants at random and purely by chance using basic random sampling, giving every member of the population an equal chance of being chosen (Amin 2005). Simple random sampling allowed for the generalization of the findings. Since specific people were required to offer in-depth perspectives for both the qualitative and quantitative investigation, purposeful sampling was utilized to choose them. Purposive sampling was carried out using intensity purposive sampling. The researcher was able to select a small number of rich samples via intensity sampling that provided in-depth knowledge and information on an interest phenomenon (Patton, 2003).

Table 3.1: Target population, sampling size and sampling techniques

Respondents	**Target population**	**Sample size**	**Sampling techniques**
Head teachers	7	7	Purposive
Teachers	72	61	Simple random
Pupils	186	125	Simple random
Total	265	157	

Source: District Education Reports, 2019.

3.3 Data collection instrument

Four different data collection methods were used in the study: a questionnaire, focus groups, interviews, and observation.

3.3.1 Questionnaire

One of the main methods for gathering data was through questionnaires. Quantitative information gathered from the respondents was beneficial. This was useful since it made it possible for the researcher to gather information from lots of respondents fast and effectively. Second, as Mugenda and Mugenda claimed, this was inexpensive and time-saving (2003). The respondents were able to freely express their opinions and record their feelings, thoughts, and beliefs regarding the phenomenon under study using this data collection tool (questionnaire). The items were short requiring direct answers built on a five- point Likert scale with five intervals of SD = Strongly disagree, D= Disagree, NI=No idea, A= Agree, SA= Strongly agree.

3.3.2 Focus group discussions.

Focus group discussions (FGDs) are a quick assessment, semi-structured data collection technique in which a predetermined group of participants meet to talk about topics and concerns in light of a set of main themes that the researchers and facilitator have developed and their responses recorded (Escalada & Heong, 2011). There were 10 FGDs, each with 8 students. Because students made up a sizable sample yet were still required for qualitative data, the FGDs questionnaire was used.

3.3.3 Interview

The study's methodology included "unstructured in-depth interviews" (Kumar, 2011, p. 160). The purpose of in-depth interviews was to "understand the informants' viewpoints on their exposure or circumstances as conveyed in their own words through repeated face-to-face

interactions with the informants" (Kumar, 2011, p. 160). The interview guides were used during the “repeated contacts with the respondents with an extended time length spent with an informant” (Kumar, 2011, p. 160).

3.3.4 Observation

The researcher used observation to understand “human actions that detectives can reason more clearly and intensely about the human condition” (Bogdan & Biklen, 2007, p. 43). in order to create "descriptive and reflective notes about the experiences, hunches, and learning from portraits of the informants, the physical setting, particular events, and activities," they used a predesigned observational guide (Creswell, 2007, p. 134).

3.4 Validity and reliability of the study

The validity of research instruments and reliability of research instruments were provided as examples of this.

3.4.1 Validity of research instruments

A research tool is regarded as valid if it succeeds in achieving its objectives (Kombo & Tromp, 2006). To ascertain the pre-test validity of the instrument and to improve the questionnaire items, concept, and wordings, the content validity of the tools was used to assess how well the items corresponding to different regions covered the study objectives. Field trials and routine expert reviews, according to Orodho (2003), are the best ways to assess an instrument's validity.

The researcher looked for any confusing or badly made things to validate the instruments. Tests were done on the instruments to see if they were reliable and effective at gathering the required data. The supervisors reviewed the questionnaire drafts to evaluate the items' viability in obtaining data in accordance with the study's objectives. Their comments assisted in making the necessary adjustments to the tools for the final data collection.

In order to evaluate whether the questionnaire was valid when it collected the data required to understand the research issue, the researcher contacted two research experts to assess the level of content validity. Based on recommendations from experts, the research tools were improved.

The validity index was tested using the following formula.

Content Validity Index = No. of items regarded relevant by judges

Total No. of items in the instrument

CVI= 27 = 0.93 or 93%
29

According to Amin's advice, the surveys were deemed legitimate if the resulting coefficient was 0.7 or above (2005).

3.4.2. Reliability of the research instruments

The consistency of the instrument under identical conditions was assessed in terms of reliability. When a data collection method produces reliable outcomes when applied again to collect ideas from the same respondents, even by other researchers, it is assumed to be dependable (Mugenda and Mugenda, 2003). The study tool was pre-tested on 10 teachers from the Adumi Sub-County to guarantee consistency and comprehensiveness in order to ensure reliability. Additionally, several discussions with supervisors and other researchers were conducted to examine the study instrument. The degree of reliability was assessed using Cronbach's coefficient Alpha.

Table 3.2: Showing the results for reliability test

Variable	**No. of Items**	**Cronbach coefficient Alpha**
Bio data	5	0.82
Research questions	24	0.86

A high Cronbach's coefficient Alpha of 0.72 or higher is regarded as indicating great dependability in social research (Mugenda and Mugenda, 2003). A statistical test was conducted using the Statistical Package for Social Scientists (SPSS), and the outcomes are shown in table 3.2. This allowed us to determine the Cronbanch's Alpha reliability Coefficient (a).

3.5 Data collection procedure

The head teachers of each chosen primary school were scheduled for meetings using an introduction letter that was obtained from Kyambogo University. On the dates of the appointments, a pre-visit to the primary schools was also made. The appropriate responders received the questionnaires. The researcher made sure to be on time for the appointments; this helped to minimize the respondents' hassles and raised the response rate.

3.6 Data Analysis

Data analysis has been presented under the following subheadings: quantitative and qualitative data analysis respectively.

3.6.1 Quantitative data analysis

The quantitative data was composed using the questionnaire; the raw data was cleaned, organized, and statistically analyzed using Pearson correlation coefficient. The Probability value (p-Value) obtained helped in deciding whether to reject or accept the alternative hypotheses.

Using the Statistical Package for the Social Sciences software and descriptive statistics, univariate analysis was carried out. With the use of SPSS software, bivariate and multivariate analysis was carried out utilizing correlation and regression analysis.

3.6.2Qualitative data analysis

Utilizing an observation guide, interview guide, and focus group discussion (FGD) guide, qualitative data was acquired during talks with students and head teachers. The information from those sources was transcribed, coded, and categorized into related groups that revealed the emerging themes (Saldana, 2016), which were corroborated and results of the quantitative data so as to realize a coherent report.

3.7 Research procedures

The researcher also ensured to obtain agreement from the respondents individually. Since the study's purpose required anonymity, it was noted that some participants did not want their names and ages to be reported. The researcher handled the responses with the utmost discretion. The respondents were notified that participation was optional and that the investigation would not pose a direct or unintentional threat.

The researcher also spoke about how crucial the study was to the academic achievement of the pupils attending UPE schools in the Ayivuni sub-county of Uganda.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 Introduction

The research findings on Universal Primary Education implementation tactics and students' academic performance in the Ayivuni sub-county are analyzed and interpreted in this chapter. The design of the study was guided by three objectives: determining the relationship between improved physical school facilities and students' academic performance in the Ayivuni sub-county; determining the relationship between adequate instructional materials and students' academic performance in the Ayivuni sub-county; and examining the relationship between teacher preparation programs and students' academic performance in the Ayivuni sub-county. The researcher starts off this chapter with outlining the demographics of the respondents, followed by data and its analysis based on the study's goals.

4.1 Response rate

In this study, every head teacher (70% of the sample) showed up for the questionnaires, and 59 (96.7%) of the 61 questionnaires given to the instructors had valid responses. 80 (64%) of the 125 students that were chosen for the FGDs showed up for the talks. The overall response rate was thus (86.9%). A response rate of 50% is appropriate for analysis and reporting, a rate of 60% is good, and a rate of 70% or more is great, according to Mugenda and Mugenda (2003). It was concluded that the response rates of 100% for the head teachers, 96.7% for the instructors, and 64% for the students, respectively, were outstanding, representative, and sufficient to draw conclusions for the study on the basis of this statement (Mugenda and Mugenda 2003).

Table 4.1: Showing the Response rate

Title	Number of questionnaires administered	Number of valid questionnaires	Percentage return (%)
Pupils	125	80	54.8
Teacher	61	59	40.4
Head teacher	7	7	4.8
Total	**193**	**146**	**100.0**

Source: Raw Data, 2019

4.2 Demographic Profile of Respondents

The demographic characteristics of the participants ranging from title, sex, age, duration in service, duration in the school, and the highest level of education, among others were analysed. These were indicated in the tables 4.2-4.7 below

4.2.1 Title of respondents

The study determined the title of the respondents. The outcomes are shown in table 4.2.

Table 4.2: Showing the title of respondents

Title	Frequency	Percent
Pupils	80	54.8
Teacher	59	40.4
Head teacher	7	4.8
Total	146	100.0

Source: Raw Data, 2019

According to Table 4.2, the bulk of respondents (54.8%) were students, followed by instructors (40.4%), and head teachers (4.8%), who made up the minority. The results imply that the study's primary respondents were instructors and students, with head teachers serving as a secondary source of information.

4.2.2 Gender of respondents

The study determined the gender of the respondents. The results are showed in table 4.3.

Table 4.3: Showing the Gender of respondents

Title of respondents	Gender	Frequency	Percent
Head teacher	Male	6	85.7
	Female	1	14.3
	Total	7	100.0
Teacher	Male	41	69.5
	Female	18	30.5
	Total	59	100.0
Pupil	Male	50	62.6
	Female	30	37.4
	Total	80	100.0

Source: Raw data.

In the study, there were more male instructors (69.5%) than female teachers (30.5%), and there were more male head teachers (85.7%) than female head teachers (14.3%), according to Table 4.3. Additionally, the table shows that there were more male students (62.6%) than female students (37.3%). This may suggest that the majority of the study's informants were men.

4.2.3 Age of respondents

The age of the interviewees was also determined by the study. The outcomes are shown in a table 4.4 below.

Table 4.4: Showing the Age of respondents

Title of respondents	Age	Frequency	Percent
Head teacher	41-50	2	28.6
	51-60	5	71.4
	Total	7	100.0
Teacher	Less than 25 years	2	3.4
	25-30	16	27.1
	31-40	19	32.2
	41-50	14	23.7
	51-60	7	11.9
	Above 60	1	1.7
	Total	59	100.0
Pupil	10-12	27	33.7
	13-15	32	40
	Above 15	21	26.3
	Total	80	100.0

Source: Raw data

Table 4.4 shows that the majority of head teachers (71.4%) were between 51 and 60 years old, the majority of teachers (35.6%) were between 31 and 40, and the majority of pupils (40%) were between 13 and 15 years old. The results of the study indicated that most of the respondents were experienced, mature, and qualified to make informed decisions regarding the study's findings.

4.2.4 Duration in service

The study also looked into the service duration of the teachers and head teachers. The results of the study are shown in the table 4.5.

Table 4.5: Duration in service

Title of respondents	Duration in service	Frequency	Percent
Head teacher	15-19	3	42.9
	Above 19 years	4	57.1
	Total	7	100.0
Teacher	Less than 5 years	3	5.1
	5-9	7	11.9
	10-14	16	27.1
	15-19	17	28.8
	Above 19 years	16	27.1
	Total	59	100.0
Pupil		80	100.0

Source: Raw data.

As can be seen in table 4.5 above, the majority of the head teachers (57.1%) had been in their positions for longer than 19 years, while the majority of the teachers (28.8%) had been in their positions for between 15 and 19 years. Meanwhile pupils had not served as head teachers or teachers, therefore data was not analysed for the pupils. The findings demonstrated that the majority of head teachers and teachers had held their posts for a sizable amount of time, had in-depth knowledge of the research criteria, and were thus prepared to provide correct information.

4.2.5 Duration of respondents in school

The study in addition determined duration of the respondents in their current school. The results are presented in table 4.6.

Table 4.6: Duration in school

Title of respondents	Duration in school	Frequency	Percent
Head teacher	Less than 5 years	1	14.3
	5-9	1	14.3
	10-14	4	57.1
	15-19	1	14.3
	Total	7	100.0
Teacher	Less than 5 years	10	16.9
	5-9	23	39.0
	10-14	17	28.8
	15-19	6	10.2
	Above 19 Years	3	5.1
	Total	59	100.0
Pupil	less than 2 years	22	27.5
	2-4	14	17.5
	5-6	20	25
	above 6 years	24	30
	Total	80	100.0

Source: Raw data.

According to data in Table 4.6, the majority of head teachers (57.1%) had worked at their current institutions for between 10 and 14 years, the majority of teachers (39.0%) had spent between 5 and 9 years there, and the majority of students (30%) had attended the institution for more than six years. The findings show that the majority of respondents had attended their current institutions for a considerable amount of time, which is consistent with the study's goals.

4.2.6 Highest level of education

The survey also examined the respondents' level of education. Table 4.7 displays the survey's findings.

Table 4.7: Level of education of respondents

Title of respondents	Level of education	Frequency	Percent
Head teacher	Master's Degree	1	14.3
	Bachelor's Degree	5	71.4
	Diploma	1	14.3
	Total	7	100.0
Teacher	Bachelor's Degree	3	5.1
	Diploma	34	57.6
	Grade III Certificate	22	37.3
	Total	59	100.0
Pupil	P.7	80	100.0

Source: Raw data.

Table 4.7 clearly outlines the varied requirements for head teachers, teachers, and pupils. The results showed that 71.4% of head teachers had bachelor's degrees, 14.3% had diplomas in education as their highest degree, and 14.3% had master's degrees. The findings also specify that 57.6% of the teachers had diplomas, compared to 37.3% who had Grade III certificates and 5.1% who had degrees. All of the pupils were in P.7 at the time.

4.3 Physical school facilities and pupils' academic performance

In order to get quantifiable information on the correlation between the physical school amenities and students' academic performance, questionnaires were given to instructors and

head teachers. In the table 4:8 below, descriptive results regarding the actual school facilities are shown.

Table 4.8: Descriptive Statistics on physical school facilities

KEY: SD= Strongly disagree D= Disagree NI=No idea A= Agree SA=Strongly agree

Aspects on Improvement of physical school facilities	Response					Mean
	SD	D	N I	A	S A	
In my school, classrooms have enough space for teachers to monitor pupils learning	33 (50.0%)	20 (30.3%)	0 (0.0)	11 (16.7%)	2 (3.0%)	4.08
In my school, pupils in all classes have enough desks or chairs for sitting.	0 (0.0)	41 (62.1%)	0 (0.0%)	12 (18.2%)	13 (19.7%)	2.95
In my school, there are enough latrine stances for pupils including those with disabilities.	12 (18.2%)	21 (31.8%)	0 (0.0%)	14 (21.2%)	19 (28.8%)	3.11
My school has permanent houses for at least four staff members.	22 (33.3%)	12 (18.2%)	0 (0.0%)	18 (27.3%)	14 (21.2%)	2.85
My school has a well-equipped library for learners and teachers to use.	3 (4.5%)	43 (65.2%)	0 (0.0%)	7 (10.6%)	13 (19.7%)	2.76
My school has adequate health and sanitation facilities for all pupils and teachers	2 (3.0%)	8 (12.1%)	0 (0.0%)	39 (59.1%)	17 (25.8%)	3.92
Overall mean						**3.40**

Source: Raw Data, 2019

As can be seen from Table 4.8, the majority of teachers and head teachers, 33 (50.0%), strongly disagreed that there was enough space in their classrooms for teachers to monitor students' learning. This was followed by 20 (30.3%), who disagreed, and 11 (16.7%), who agreed, while only 2 (3.0%), strongly agreed. This indicates that most schools in the Ayivuni

sub-county lack adequate classroom space for teachers to keep an eye on students' progress. 4.08 is the mean. This indicates that the condition of the classrooms in the Ayivuni sub-county is fair.

Similarly, the majority of 41 (62.1%) teachers and head teachers disagreed that students in all classes had enough desks or chairs for sitting in their schools. These teachers and head teachers were followed by 13 (19.7%) who strongly agreed and 12 (18.2%) who agreed that this was the case. This meant that there aren't enough desks or chairs for students to sit in majority of the schools in the Ayivuni sub-county. Mean value is 2.95. This indicates that majority of primary schools in Ayivuni sub-county have moderate sitting materials for both teachers and pupils.

Likewise, the majority 21(31.8) disagreed that in their schools there were enough latrine stances for pupils including those with disabilities, 19(28.8%) strongly agreed followed 14(21.2%) who agreed, while 12(18.2%) strongly disagreed that in their school there were enough latrine stances for pupils including those with disabilities. This indicated that in most of the schools in Ayivuni sub-county, the latrine stances were not enough for pupils including those with disabilities. The mean is 3.11, this implies that the state of toilets in Ayivuni sub-county is moderate.

Correspondingly, the biggest percentage of teachers and head teachers 22 (33.3%) strongly disagreed that their schools had permanent housing for at least four staff members. This was followed by 18 (27.3%) who agreed, 14 (21.2%), who strongly agreed, and 12 (18.2%) who disagreed. This demonstrated that the majority of schools in the Ayivuni sub-county lack permanent housing for at least four staff members, while the mean showed a moderate state of housing (2.85).

Congruently, the majority of teachers and head teachers, 43(65.2%), disagreed that their schools had a library that was suitable for use by both teachers and students, followed by 13 (19.7%) who strongly agreed, 7 (10.6%) who agreed and only 3 (4.5%) strongly disagreed that their schools had a library that was ready for pupils and teachers to use. This demonstrated the lack of well-stocked libraries for pupils and teachers to use in the majority of the schools in Ayivuni sub-county. As indicated by the mean of 2.76, the situation is moderate.

A majority 39(59.1%) of both the teachers and head teachers disagreed that their schools had adequate health and sanitation facilities for all pupils and teachers, 17(25.8%) strongly disagreed, 8(12.1%) agreed, while only 2(3.0%) strongly agreed that their schools had adequate health and sanitation facilities for all pupils and teachers. This meant that most schools in Ayivuni sub-county, do not have adequate health and sanitation facilities for all pupils and teachers. Generally, physical school facilities in primary schools in Ayivuni sub-county were moderately good with the exception of a few primary schools (Overall mean = 3.40).

The next stage was to carry out a Pearson's correlation analysis to determine the existence, strength, and direction of a linear link between the improvement of physical school facilities and students' academic performance in the Ayivuni sub-county. The results are presented in Table 4.9.

Table 4.9: Showing correlation between improvement of physical school facilities and pupils' academic performance

		Pupils' academic performance	**Physical school facilities**
Pupils' academic performance	Pearson Correlation	1	.672**
	Sig. (2-tailed)		.000
	N	66	66
Physical school facilities	Pearson Correlation	.672**	1
	Sig. (2-tailed)	.000	
	N	66	66

**. Correlation is significant at the 0.005 level (2-tailed).

Source: Raw Data, 2019

The study's objective was to determine whether UPE had made significant improvements to the physical school facilities and how those changes had affected the students' academic performance. To ascertain the relationship between the physical school amenities and pupils' academic achievement, a Pearson product-moment correlation was used. Academic achievement of the pupils and improvements to the physical school facilities exhibited a strong positive connection that was statistically significant ($r = .672$, $N = 66$, $p = 0.00$). This showed a connection between improved school facilities and increased academic achievement among pupils in the Ayivuni sub-county. In light of this, alternative hypothesis 1, which states that "There is a statistically significant link between improvement of physical school facilities and children's academic achievement," is chosen.

Regression results for physical school facilities and pupil's academic performance in Ayivuni sub-county

The study's findings showed that students' academic performance was significantly impacted by the physical school facilities. Data indicated that the students' academic performance was significantly impacted by the facilities.

Table 4.10: Shows findings on regression analysis showing the relationship between physical school facilities and pupils' academic performance.

R Square = .123				F =10.120		
Adjusted R Square = .111				Sig = .000		
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.041	.174		5.971	.000
	Physical school facilities	.348	.109	.351	3.181	.002
a. Dependent Variable: pupils academic performance						

Source: Raw Data, 2019

Table 4.10's findings indicate that physical school facilities are more statistically significant predictors of students' academic achievement (Beta =.351, Sig. =.000), as 12.3% of the variance in students' academic performance is attributable to them (Adjusted R Square =.111). Regression model fit was generally significant at sig. =.000. The above findings from the questionnaires given to teachers and head teachers are additionally supported by findings from FGDs with pupils, interviews with certain teachers and head teachers, and observations. Numerous problems with the physical school facilities at the primary schools in the Ayivuni sub-county were identified, and the findings were consistent with the conclusions in Tables 4.9 and 4.8.

During FGDs with pupils, when asked the different physical school facilities in their school in Ayivuni sub-county, the responses from most of the pupils were similar they stated that in most of their schools, the physical school facilities like libraries, were lacking, classrooms were dilapidated and overcrowded. They added that most of their schools do not have classrooms with enough space which makes the pupils who sit behind the classroom make a lot of noise during lessons because they know that teachers are unable to reach them. This clearly indicated that not all the primary schools in Ayivuni sub-county have enough physical

facilities like: libraries classrooms and toilets. This negatively affects pupil's academic performance.

In addition, from the FGDs, quite number of pupils noted that their schools do not have enough desks and chairs for sitting they are forced to squeeze themselves on the few desks while other pupils in the lower classes are even made to sit on the floor, which makes it hard for them to write properly. This shows that some schools in Ayivuni sub-county do not have enough desks and chairs for sitting.

Other pupils lamented that in their schools they did not have enough latrines, and even the few were dilapidated. This affected all learners, but those with special needs had worse experiences in this aspect. One pupil added that:

> The latrine challenges have contributed to our poor performance. Latrines in our schools are far away from the classrooms, and are in dire sanitary state. Our friends who are disabled face rough time when they visit the toilets especially on rainy days (FGD September 20, 2019).

This was repeatedly alluded to by the pupils. Another pupil expressed her frustration about sharing of toilets among learners and teachers in her school that:

> One day I rushed to ease myself, but when I opened the door, I found my science teacher was inside already. Although I was badly off, the serious looks of our teacher scared me away, this keeps reminding me whenever I see her. (FGD, September 25, 2019)

Conversely, other pupils reported that in their schools, both girls and boys used the same latrines. Some stubborn boys scare girls from accessing the toilets, one girl expressed that: "These boys first make a girl to enter in the toilet and open the door before nocking so as to make fun of you. This makes some girls to access toilets from nearby homes or prefer staying home." Therefore, inadequate latrines for pupils including those with disabilities affect

pupil’s academic performance. The pupils added that majority of their teachers came late to school, partly because they stayed far away and teacher’ absenteeism was reportedly rampant. This results in certain classes missing lessons, which has a severe impact on the academic performance of the students.

Some pupil complained that their schools did not have properly furnished libraries where they could study. Pupils explained that lack of a library in the school makes it difficult for them to do personal reading especially when they are free. This meant that not having well-equipped libraries for learners and teachers to use is another major challenge that affects pupil’s academic performance in the primary schools in Ayivuni sub-county.

Furthermore, the pupils explained that schools lack adequate health and sanitation facilities for female pupils. Some girls also reported that they lacked bathing and changing rooms which has caused absenteeism of many girls during their menstruation periods. This forces girls to remain at home for some period of time and join learning later yet other pupils continue learning. Inadequacy of the health and sanitation facilities for female pupils and teachers certainly affect pupils’ academic performance in Ayivuni sub-county (FGD, 10 August, 2019, Ayivuni P/S).

As opposed to this, the majority of the head teachers and teachers who responded to the researcher's question about whether there is a link between improving physical school facilities and students' academic performance in the Ayivuni sub-county gave congruent responses, which suggested that improving physical school facilities have a positive impact on students' academic performance in primary schools. They continued by saying that the majority of their schools lacked updated classrooms, restrooms, and libraries.

During the interview, teachers explained that the congestions in the classes made their class management difficult because they could not freely move while monitoring and checking on

pupils' work during lesson hours. It also becomes very difficult for them to cater for individual differences, living the slow learners behind which is not good. All these issues negatively affected the pupil's academic performance in Ayivuni sub-county. One teacher said that:

> Inadequacy of the classrooms and desks were the leading cause of pupils' failure to pay close attention to teachers, poor writing skills and loss of morale for learning. This was a problem that had existed even before UPE, but was made worse due increased enrollment and this negatively affected pupils' academic performance. Therefore, not having enough classrooms and desks for sitting in all classes affects pupil's academic performance in Ayivuni sub-county.

Furthermore, some female teachers especially the senior woman teachers expressed lack of adequate health and sanitation facilities for female pupils and teachers. They also reported that girls lack bathing and changing rooms to be used during their menstruation periods which has caused absenteeism among girls. Hence leading to poor academic performance. This implied that pupils' academic performance in Ayivuni sub-county is certainly affected by the inadequate health and sanitation facilities for female pupils and teachers. (FGD, 10 August, 2019, Ayivuni P/S).

In the primary schools in the Ayivuni sub-county, the researcher observed the physical school facilities, namely the classrooms, libraries, and restrooms, and discovered that some of the schools lack adequate physical amenities. Such experiences affect learning. It becomes extreme when pupils have to wait for some time to gain access and ease themselves or go to nearby bushes. Eventually many pupils resolve to stay at home, especially girls in their menstruation periods. Additionally, lack of libraries in the schools has led to poor storage of the few available text books. One may fail to differentiate between a library and a store in all

the primary schools in Ayivuni sub-county. Because things like used timbers, cassava floor, pots, saucepans, are all mixed in a room called to be a library.

Indeed, when the researcher looked at the teachers' arrival books, class registers, teachers and pupils note books they revealed signs of rampant absenteeism among teachers and pupils, the researcher also observed few staff houses in most schools in Ayivuni sub-county. All these cause failures to complete the syllabi. This means even after its introduction, UPE has not improved staff accommodation in schools. Yet, not having permanent houses for staff members negatively affects pupil's academic performance.

The researcher also observed that most of the primary schools in Ayivuni sub-county do not have enough latrine stances for both boys and girls including pupils with disabilities. They schools needed the availability of bathing shelters and changing rooms for the girl child to keep them in school which were missing in the majority of the schools. Hence making them either perform poorly or drop out of school when they start menstruating.

According to the aforementioned questionnaire responses, FGDs with students, interviews with head teachers and other selected teachers, as well as the researcher's own observations, the physical condition of school facilities at primary schools in Ayivuni sub-county was moderate. It has a negative effect on the students' academic success. This amply illustrated the connection between improving the physical school facilities and kids' academic achievement in the Ayivuni sub-county.

4.4 Adequacy of instructional materials and pupils' academic performance

Similar surveys were distributed to teachers and head teachers in order to collect quantitative data on the relationship between the appropriateness of teaching materials and students' academic progress.

Table 4.11: Adequacy of instructional materials and pupils' academic performance

KEY: SD= Strongly disagree D= Disagree NI=No idea A= Agree SA=Strongly agree

Aspects on	Response					Mean
	SA	A	NI	D	SD	
My school has got enough text books for all pupils.	6 (9.1%)	7 (10.6%)	0 (0.0%)	26 (39.4%)	27 (40.9%)	3.92
In my school all teachers are provided with teachers' guides.	21 (31.8%)	13 (19.7%)	2 (3.0%)	17 (25.8%)	13 (19.7%)	2.82
My school has visual charts and real objects for demonstrations when teaching.	4 (6.1%)	19 (28.8%)	3 (4.5%)	21 (31.8%)	19 (28.8%)	3.48
My school provides enough writing materials for teachers.	14 (21.3%)	7 (10.6%)	0 (0.0%)	28 (42.4%)	17 (25.8%)	3.41
In my school, the pupils have enough writing materials.	24 (36.4%)	14 (4.5%)	0 (0.0%)	16 (24.2%)	12 (18.2%)	2.67
In my school, there are adequate chalk boards and chalks	4 (13.6%)	11 (16.7%)	0 (0.0%)	27 (40.9%)	19 (26.8%)	3.55
Overall mean						**3.31**

Source: Raw Data, 2019

According to the results in the table above, the majority 27 (40.9%) of the teachers and head teachers strongly disagreed that their schools had enough text books for all pupils, followed by 26(39.4%) who disagreed, 7(10.6%) agreed, while 6(9.1%) strongly agreed that their schools had enough text books for all pupils. This implied that most of the schools in Ayivuni sub-county did not have enough text books for all pupils. The mean is 3.92, this implies that the state of text books was fair.

A majority 21(31.8%) of both the teachers and head teachers strongly agreed that in their schools all teachers are provided with teachers' guides, 17(25.8%) agreed, 13(19.7%) disagreed, 13(19.7%) strongly disagreed, while 2(3.0%) had no idea. This indicated that

teachers are provided with teachers' guides in Ayivuni sub-county. The mean is 2.82. This suggests that the majority of the respondents accepted the statement.

In another development, 21(31.8%) of teachers and head teachers agreed that their schools had visual charts and real objects for demonstrations when teaching, followed by equal number 19(28.8%) who strongly agreed, 19(28.8%) disagreed and 4(6.1%) who strongly disagreed, while 3(4.5%) had no idea. This meant that some schools had adequate visual charts and real objects for demonstrations when teaching. The mean is 3.48. This implies a moderate state of availability of visual charts and real objects in primary schools in Ayivuni sub-county.

Similarly, the largest number 28(42.4%) of respondents agreed that their schools provided enough writing materials and papers for teachers, followed by 17(25.8%) who strongly agreed, 14(21.2%) strongly disagreed and 7(10.6%) disagreed that their schools provided enough writing materials and papers for teachers. This revealed that the majority of the schools in the Ayivuni sub-county do offer instructors enough writing supplies and sheets. The mean is 3.41, meaning a moderate state.

In light of this, the majority of head teachers and instructors—24 (36.4%)—strongly disagreed that students in their schools have access to enough writing tools, while 16 (24.2%), 14 (21.2%), and 12 (18.3%) disagreed. This implied that pupils do not have enough writing materials in most of the schools in Ayivuni sub-county. Mean is 2.67, which reveals a fair state.

Lastly, the majority 27(40.9%) of head rspondents agreed that in their schools there were adequate chalk boards and chalks, followed by 19(26.8%) who strongly agreed, 11(16.7%) disagreed, 9(13.6%) who strongly disagreed that in their schools there were adequate chalk

boards and chalks. This showed that the most of the schools in the Ayivuni sub-county have chalks and chalkboards that are generally suitable. The overall mean result of the sufficiency of instructional materials in primary schools in the Ayivuni sub-county was at a reasonable level. (Mean = 3.31).

The study's findings showed that students' academic performance was significantly impacted by the physical school facilities. The results of the analysis were used to create Table 4.11, which shows a linear association between the students' academic achievement and the suitability of the instructional materials.

Table 4.12: Correlation between adequacy of instructional materials and pupils' academic performance

		Pupils' academic performance	**Adequacy instructional materials**
Pupils' academic performance	Pearson Correlation	1	0.764**
	Sig. (2-tailed)		0.000
	N	66	66
Adequacy instructional materials	Pearson Correlation	.764**	1
	Sig. (2-tailed)	.000	
	N	66	66

**. Correlation is significant at the 0.005 level (2-tailed).

Source: Raw Data, 2019

The goal of the study was to ascertain whether there is a connection between students' academic progress and the caliber of instructional resources. A Pearson product-moment correlation was carried out to determine the relationship between the effectiveness of instructional materials and students' academic achievement. The results revealed a strong positive correlation (r =.764, N = 66, p = 0.000) between students' academic achievement and

the standard of instructional materials. This shows that having proper teaching materials in the Ayivuni sub-county improves pupils' academic achievement. Alternative hypothesis number two is accepted since there is a statistically significant link between the caliber of instructional materials and students' academic success.

Regression results for instructional materials and pupils' academic performance in Ayivuni sub-county

In order to determine how much instructional materials had an impact on students' academic progress, regression analysis was performed to evaluate the impact of independent factors on the dependent variable, as shown in table 4.13.

Table 4.13: Regression analysis

R Square = .847 Adjusted R Square = .843					F =210.383 Sig = .000	
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.186	.143		1.303	.200
	Instructional materials	.797	.055	.920	14.505	.000
a. Dependent Variable: Pupils academic performance						

Source: Raw Data, 2019

Table 4.13's findings indicate that instructional materials account for 84.7% of the variance in students' academic achievement (Adjusted R Square =.843), indicating that they are more statistically significant predictors of students' academic performance (Beta =.920, Sig. =.000). Regression model fit was generally significant at sig. =.000.

To triangulate these quantitative data findings from the questionnaires, FGDs with the students, interviews with the head teachers and some teachers, and researcher observations were all employed. The results supported the information in Tables 4.12 and 4.13. When asked if there was a connection between the caliber of teaching materials and students' academic performance in the Ayivuni sub-county, the majority of respondents agreed. For

example, during the FGDs, greater number of the pupils said there exists few textbooks matched to the number of pupils especially at lower and middle primary levels. This makes learning difficult, as teachers fail to give adequate exercises and to cater for pupils' individual difference. They added that as their schools do not have better libraries, the few available books are not well kept and hard to get even others are being destroyed by the termites and rain water. Pupils explained that some teachers do not bring these books to the pupils during lessons, which makes it hard for pupils to do class exercises and homework, which could improve their academic performance. Pupils generally argued that, having enough text books could improve their academic performance in Ayivuni sub-county.

Furthermore, the pupils explained that some teachers use visuals charts and real objects for demonstrations when teaching which makes their lessons exciting. Some of the charts are left on the walls which encourages incidental reading among learners. As a result, pupils' academic performance is improved. This indicated that some teachers in Ayivuni sub-county use visuals charts and real objects for demonstrations when teaching.

The pupils opined that their teachers are provided with writing materials such as chalks, pens, papers, books, and manila cards, and all classrooms have chalkboards. Provision of writing materials for teachers can improve pupils' academic performance. However, most pupils noted that their parents do not provide them with sufficient learning materials like pens, exercise books, rulers and sets. This indicated that some parents in Ayivuni sub-county have abandoned their roles of providing writing and reading materials to their children, which is harmfully affecting pupils' performance.

Most head teachers said that the government and the schools are making every effort during an interview with them and a few other instructors. By making sure that most of the learning materials like the chalkboard, chalks, papers, teachers' schemes of work/ lesson plan books,

pens, manila cards, and rulers must be available in order to improve teaching and learning process. These learning materials improve pupil's academic performance. This proved that instructional materials are employed in the Ayivuni subcounty's primary schools during the teaching and learning process.

A head teacher expressed disappointment on the side of some parents and said that:

> Some of our parents are difficult people to convince when it comes to supporting their children with scholastic materials. Others even told me that it is the government to provide the learners with books, pens, and pencils during Universal Primary Education. This negatively affects pupil's academic performance because it becomes difficult for such learners to practice what was learnt.

Some teachers also explained that they face difficulties in assessing pupils' performance in different activities like class exercises, home works if the pupils lack scholastic materials like books pens pencils. This indicated that some parents in Ayivuni sub-county have neglected their roles of providing writing and reading materials to their children, which is harmfully affecting pupils' performance.

The teachers added that teaching is enjoyed when the needed learning materials such as real objects, charts, and teachers' guides are available. That teachers' guides simplify work because the teaching resources are well explained in them. But expressed dissatisfaction by saying that in most of the schools these teachers' guides are not enough for all teachers. This creates delays in making schemes of work and planning lessons. Therefore, improving student academic performance in Ayivuni sub-county requires giving teachers' manuals to all of them as well as using visual aids like charts and real objects for demonstrations.

The teachers also opined that in the most of the schools there was shortage of text books. Saying that the ratio text to number of pupils sharing the same book is mostly 1:5. This has greatly affected pupils' reading culture and poor performance in the home works given to them. The researcher observed that most schools in Ayivuni sub-county do not have enough textbooks that can be used by pupils during their individual studies or for doing homework. The few books are not well kept because the schools lack well organized libraries.

When the researcher checked the pupils' exercise books, it was discovered that some pupils' books were already filled and did not contain the current activities. Their parents could not replace the old books with new ones. Therefore, if the government provides enough writing materials for teachers, parents need to do a similar thing for their children. So that pupils' academic performance can improve.

According to the aforementioned questionnaire responses, focus group discussions, interviews, and observations on the relationship between adequate instructional materials and students' academic performance, none of the primary schools in the Ayivuni sub-county had adequate instructional materials, which contributed to the students' subpar academic performance. This showed a connection between students' academic success and the quality of the teaching resources in the Ayivuni sub-county.

4.5 Training of teachers and pupils' academic performance

To gather statistical data on the connection between teacher preparation and pupils' academic performance, questionnaires were given out to both teachers and head teachers.

Table 4.14: The relationship between Training of teachers and pupils' academic performance.

KEY: SD= Strongly disagree D= Disagree NI=No idea A= Agree SA=Strongly agree

Aspects on Training of teachers	**Response**					**Mean**
	S A	**A**	**N I**	**D**	**S D**	
In my school all the teachers are well trained and qualified	19 (28.8%)	23 (34.8%)	0 (0.0%)	17 (25.8%)	10 (15.2%)	3.45
In my school teachers are invited for special trainings when there are changes in syllabi/curriculum	11 (16.7%)	24 (36.4%)	0 (0.0%)	20 (30.3%)	11 (16.7%)	3.06
My school has experienced teachers.	18 (27.3%)	24 (36.4%)	0 (0.0%)	16 (24.2%)	8 (12.1%)	3.42
The government provides workshop opportunities for the teachers in my school.	10 (15.2%)	16 (24.2%)	2 (3.0%)	26 (39.4%)	12 (18.2%)	2.79
In my school, teachers are allowed to upgrade when interested.	23 (34.8%)	23 (34.8%)	0 (0.0%)	14 (21.2%)	6 (9.1%)	3.65
In my school, teachers get opportunities to participate in refresher courses.	12 (18.2%)	31 (47.0%)	0 (0.0%)	13 (19.7%)	10 (15.2%)	3.33
Overall mean						**3.29**

Source: Raw Data, 2019

The majority of teachers and head teachers, 23 (34.8%), believed that all of the teachers in their schools were well qualified and trained, according to the findings in table 4.14 above. Following this, 17 (25.8%) disagreed, 10 (15.2%) strongly disagreed, and 19 (28.8%)

strongly agreed. This indicated that the vast majority of the elementary school instructors in the Ayivuni sub-county were capable and knowledgeable. The average is a mild 3.45.

When asked if teachers in their schools were invited for special trainings when syllabi or curricula changed, the majority of head teachers and teachers 24 (36.4%), agreed. This was followed by 20 (30.3%), who disagreed, 11 (16.7%) strongly agreed, and equally 11 (16.7%) strongly disagreed. This suggested that when there were changes to the curricula or syllabi some teachers were invited for special trainings in Ayivuni sub-county. The mean value of 3.06 denotes a moderate state.

Regarding whether the schools had experienced teachers, majority of respondents 24(36.4%) agreed, followed by 18(27.3%) who strongly agreed, 16(24.2%) who disagreed. The least number of respondents 8(12.1%) strongly disagreed that their schools had experienced teachers. This meant that majority of the teachers in Ayivuni sub-county were experienced. The mean is 3.42, which is at moderate rate.

The results on whether the government provided workshop opportunities for the teachers in the primary schools, majority 26(39.4%) of both the teachers and head teachers disagreed that the government provided workshop opportunities for the teachers, followed by 16(24.2%) who agreed, 12(18.2%) strongly disagreed, 10(15.2%) strongly agreed that the government provided workshop opportunities for the teachers, while 2(3.0%) had no idea. This implied that not all the teachers in Ayivuni sub-county got workshop opportunities from the government. The mean is 2.79 meaning fair level.

Therefore, the same number of teachers and head teachers (23; 34.8%) highly agreed and agreed that teachers were permitted to upgrade when interested in their schools. 14 (21.2%) people disagreed with this, and 6 (9.1%) of them severely disagreed. This demonstrated that

not all primary school teachers in the Ayivuni sub-county were permitted to advance when they were interested. The mean is 3.65, a moderate state.

From the table above, the biggest number of respondents 31 (47.0%) agreed that teachers in their schools got opportunity to participate in refresher courses. This was followed by 13 (19.7%) who disagreed, 12 (18.2%) who strongly agreed, and 10 (15.2%) who strongly disagreed. This suggested that not all the teachers in Ayivuni sub-county got opportunity to participate in refresher courses. Although most of the teachers in primary schools are qualified but some have not received retraining, the level of training is generally moderate (Mean3.29).

After that, a Pearson's correlation analysis was carried out to ascertain the existence, magnitude, and direction of a linear relationship between teacher preparation and retraining and pupil academic achievement in primary schools in the Ayivuni sub-county. The results are presented in Table 4.12.

Table 4.15: Correlation between training of teachers and pupils' academic performance

		Pupils' academic performance	**Training and retraining of teachers**
Pupils' academic performance	Pearson Correlation	1	.660**
	Sig. (2-tailed)		.000
	N	66	66
Training of teachers	Pearson Correlation	.660**	1
	Sig. (2-tailed)	.000	
	N	66	66

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Raw Data, 2019

The researcher wanted to know if there was a connection between teacher preparation programs and students' academic achievement in the Ayivuni sub-county. The association between teacher preparation programs and students' academic achievement was investigated using a Pearson product-moment correlation. (r =.660, N = 66, p = 0.000) The academic performance of the children and the preparation of the teachers were statistically significantly correlated. This indicated that teacher training improves student academic achievement in the Ayivuni sub-county. Since there is a statistically significant correlation between teacher training programs and pupils' academic achievement, the third alternative hypothesis is adopted.

Regression results for training of teachers and pupils' academic performance in Ayivuni sub-county

According to the table below, regression analysis was used to assess the impact of independent variables on the dependent variable, which measures how much teacher preparation affects students' academic progress.

Table 4.16: Regression analysis

R Square = .766 Adjusted R Square = .760				F =124.694 Sig = .000		
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.116	.186		5.994	.000
	Training of teachers	.843	.076	.875	11.167	.000
a. Dependent Variable: pupils academic performance						

Source: Raw Data, 2019

Table 4.16's findings indicate that training of teachers is more statistically significant predictor of pupils' academic performance (Beta =.875, Sig. =.000), as evidenced by the finding that 76.6% of the variance in pupils' academic performance can be attributed to

teachers' training (Adjusted R Square =.760). The fit of the regression model was significant at sig. =.000.

To triangulate these quantitative data findings from the questionnaires, FGDs with the students, interviews with the head teachers and a few chosen instructors, and researcher observations were carried out. The outcomes matched those in Tables 4.14 and 4.15. The majority of respondents who were asked whether there is a connection between teacher training and students' academic performance in the Ayivuni sub-county had similar responses, which are listed below: -

During the FGDs, pupils generally agreed that in their schools almost all the teachers were trained, qualified and in better position to guide and prepare them for the examinations, and also follow the syllabi that is followed by UNEB. Trained and qualified teachers could improve pupil's academic performance. The findings demonstrated that having qualified and competent teachers as well as further trainings for teachers when there are adjustments to the syllabi or curriculum improves the academic performance of pupils in the Ayivuni sub-county.

Furthermore, the pupils also stated that all of the teachers in their schools had experience, which had a significant impact on their academic success. Similarly, the pupils acknowledged that other teachers were always provided with workshop opportunities by the government. This improves teachers' performance and improves pupil's academic performance. Therefore, if implementation of UPE contributes to deployment of experienced teachers and provision of workshop opportunities by the government, this can improve student's academic performance in Ayivuni sub-county.

The majority of head teachers stated that instructors at their institutions are regularly invited to training sessions. They added that it was a good idea for teachers to get opportunities to

participate in refresher courses, workshops, and to upgrade when a teacher was interested, this can improve the performance of learners and teachers. This indicated that some teachers in Ayivuni sub-county get opportunities to attend refresher and workshop trainings. Which could improve pupils' academic performance.

Some head teachers exposed that other teachers do not put into practice the knowledge acquired from these trainings. The teachers complained of the schools not providing them with the necessary learning materials that they could use for practicing what they learnt from the workshops. During school planning meetings, the schools needed to budget for all the necessary items especially learning materials so as to improve teaching and learning process in the schools.

The teachers also expressed that not all the teachers get the opportunities to attend refresher courses and workshops. It was the few selected teachers who get chances to participate in the workshops. They added that the selected teachers who always attended workshops were expected to roll out what they learnt in the workshops to other teachers but none has ever taken place. The academic performance of the students in the Ayivuni sub-county could be considerably improved if all the teachers had the opportunity to attend refresher courses and workshops. If all the teachers had the chance to take refresher courses and workshops, the academic performance of the kids in the Ayivuni sub-county may be greatly enhanced.

When the researcher observed the teachers while teaching, their work schedule, lessons plan, records of work and pupils' participation during the lessons and the pupils note books, it was evidently noted that most of the teachers were trained and experienced. The results from the above responses indicated that training of teachers improves pupils' academic performance. The study's conclusions showed that teacher preparation significantly affects students' academic achievement in the Ayivuni sub-county.

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This study sought to ascertain how the Ayivuni sub-students' county's academic performance related to UPE policy implementation tactics. This study's goal was to evaluate and interpret the results of a cross-sectional survey design. Both qualitative and quantitative research methodologies were used to complete it. And was driven by three goals: determining the association between bettering physical school facilities and students' academic achievement in the Ayivuni sub-county; determining the association between adequate instructional materials and students' academic achievement in the Ayivuni sub-county; and determining the association between teacher training and students' academic achievement in the Ayivuni sub-county. The debates and findings' conclusions are presented in this chapter. Additionally, it makes suggestions and identifies areas that require more research.

5.1 Discussion of the Findings

This study aimed to determine the association between UPE policy implementation tactics and students' academic achievement in the Ayivuni sub-county. The findings are described here in light of the study's objectives:

5.1.1 Physical school facilities and pupils' academic performance in Ayivuni sub-county

This study's primary goal was to determine whether there was any connection between bettering the physical school facilities and students' academic performance in the Ayivuni sub-county. $H_1 1$, a competing study hypothesis, asserts that "there is a statistically significant link between improvement of physical school facilities and children's academic progress". It was determined that physical school facilities in primary schools in the Ayivuni sub-county are responsible for a 12.3% difference in students' academic performance. This demonstrates

that physical school facilities development and student academic achievement are statistically significantly related. Indeed, in the Ayivuni sub-county, inadequate physical school facilities have a severe impact on students' academic achievement.

The findings of the study are similar to those of a previous study conducted by Mfreke in 2016. He found that school facilities can positively affect the academic performance of students. He also made the point that the more students who have access to adequate physical school facilities, the more their performance will advance. This was in line with UNESCO's (2005) assertion that a school's infrastructure is crucial to providing high-quality services to its students.

This study was in line with that of Alubisia (2005), who observed that among the challenges faced by elementary school students in Sub-Saharan Africa include crowded classrooms and a lack of restrooms where boys and girls are required to share. The absence of physical infrastructure in public schools continues to be a major obstacle to achieving overall performance in public schools, according to Too (2005).

The findings of the study were in line with those of Haastrup, Timilehin, and Ekundayo, who conducted a similar study in 2012. They discovered that school facilities had a significant effect on the academic performance of students.

The study conducted by Adaramaja, Adeyemi, and Ahmodu in 2018 revealed that school facilities can positively affect the academic performance of students. It was conducted in Lagos State's Oshodi-Isolo Local Government Area. The researchers found that the standard of school buildings and the academic achievement of students were generally high. They also discovered a strong correlation between the school infrastructure and the students' performance.

According to McGrowen (2007), school facilities are the most critical materials that schools need to be put in place in order to achieve their goals. The availability of these facilities can also affect the academic performance of students. However, there is no literature about facilities that have been introduced during UPE implementation in Ayivuni sub-county, intended to cause improved quality of instructions in primary schools. Therefore, the researcher was interested in learning about the facilities that UPE implementers had added in order to raise the caliber of instruction.

On the other hand, Ashrof and Fattinbinti (2017) found that students with good physical facilities and adequate physical facilities performed better in the learning process and exams. Additionally, physical amenities like a school's structure, classrooms, labs, library, restrooms, instructional materials, landscaping, recreation areas, and health facilities make learning activities in the classroom and at school more convenient for both students and teachers, which improves academic performance.

5.1.2 Adequacy of instructional materials and pupils' academic performance in Ayivuni sub-county.

In the Ayivuni sub-county, this study also sought to ascertain the relationship between the caliber of teaching materials and students' academic success. The alternative research hypothesis, $H_1 2$, was therefore suggested for the study and claims that "The quality of instructional materials and students' academic achievement are statistically significantly related. It was shown that 84.7% of the variation in students' academic performance may be attributed to the availability of instructional resources in primary schools in the Ayivuni sub-county. This revealed a statistically significant association between students' academic success and the adequacy of the teaching materials in the Ayivuni sub-county. Which means that adequate instructional materials lead to an improvement in pupils' academic performance

in Ayivuni sub-county. Similarly, inadequacy of instructional materials for both teachers and pupils lead to poor pupils' performance.

The findings of Adeogun (2001), discovered a very strong positive significant association between instructional resources and students' academic achievement, were consistent with those of this study. This was also consistent with the findings of Etsey (2005), who found that insufficient instructional resources are among the causes of subpar performance. The outcome was consistent with that of Asikhia (2010), who noted that the amount of learning that may occur at a learning institution and, consequently, learner performance depends on how well structured the instructional materials are.

This outcome was in line with that of Adalikwu (2013) and Olayinka (2016), who discovered that students performed better when they were taught utilizing instructional resources. Additionally, they discovered that incorporating instructional materials often improved students' understanding of ideas and led to superior academic performance. Having good facilities is a necessary precondition for students to learn, when other factors are in place to promote a solid academic program in the school.

The results concurred with those of Adalikwu and Iorkpilgh (2013), who looked into how teaching aids (instructional materials) influenced the academic achievement of pupils in Cross River State's senior high school chemistry. The findings showed a statistically significant correlation between the academic success of chemistry students and their usage of instructional materials during the teaching-learning process.

Adeogun (2001) remarked that educational materials boost teachers' performance in the classroom because they augment, complement, and supplement their effort, and these results support his observation. The goal of this study was to ascertain whether the public colleges of education in Lagos State have enough instructional resources to ensure quality.

The results of the study support Olayinka's (2016) claim that using instructional materials can improve the academic performance of students. According to Olayinka (2016), students' academic performance improves significantly when teachers employ key instructional materials in their instruction and improvise when those materials aren't available.

5.1.3 Training of teachers and pupils' academic performance in Ayivuni sub-county.

In the Ayivuni sub-county, the study also sought to ascertain the relationship between teacher preparation programs and pupils' academic achievement. H_13, a competing research hypothesis, contends that "there is a statistically significant link between teacher preparedness and students' academic achievement" and was also proposed for the study. It was shown that 76.6% of the variation in pupils' academic achievement may be attributed to teacher preparation. This demonstrates an association between teacher training programs and kids' academic achievement in the Ayivuni sub-county that is statistically significant. This suggests that teacher education raises academic performance among students in the Ayivuni sub-county.

The outcomes were in line with those found by Enamul et al. (2010), who found that teacher professional development activities had a significant impact on school improvement, particularly student performance. This result was also in line with those of Mahulo (2012), According to Oshinyadi et al. (2016) and Suleiman et al. (n.d.), teacher development is essential for student achievement and development on various levels. It also backs up the findings of Alubisia (2005), who argued that the shortage of qualified primary school teachers in Sub-Saharan Africa is one of the factors contributing to low student performance. This implies the need for increased teacher training.

The findings were related to those made by the National Staff Development Council (2001), which concurred that training had a discernible influence on students' performance.

According to Wested, Ashton, and Crocker (2000), training improved student performance and accountability. Porter et al. (2000) also concurred that an important component of high-performing schools was teacher preparation. Wenglinsky (2000) discovered a connection between better math and science test scores for students and teacher preparedness when working with specific student groups.

5.2 Conclusion

According to this study, there is a connection between students' academic achievement and physical school facility improvement. Availability of physical school facilities like class room blocks, library, toilets, and dormitories in good conditions makes it favorable for students to study well and thereby leading to enough concentration while studying. Enough class room also reduces the cases of pupil's congestion in classes.

The study comes to the further conclusion that there is a connection between students' academic achievement and the suitability of teaching materials. Instructional materials like text books, charts are very significant for children to make research in their free time. This increases their knowledge in different subjects and thereby leading to better performance.

The study also comes to the conclusion that there is a connection between primary school students' academic achievement and teachers' training. Better understanding of the teaching methodologies by teachers is very key in improving the quality of teaching. Well trained teachers equip children with the right content and this helps in improving their numeracy and literacy skills which leads to better performance both in class and outside class.

Therefore, proper implementation of the strategies of UPE policy through improvement of physical school facilities; provision of adequate instructional materials and training of teachers is key in improving students' academic performance in primary schools.

5.3 Recommendations

5.3.1 The relationship between improvement of physical school facilities and pupils' academic performance in Ayivuni sub-county

The school management committees, the MOEs communities, and other stakeholders should consider about improving physical school facilities to raise students' academic achievement in the Ayivuni sub-county and throughout Uganda.

All UPE schools in Ayivuni should be supported with new classroom blocks as there is much congestion of learners in classrooms and libraries as most schools lacked libraries which would encourage learners to do private studies.

5.3.2 The relationship between the adequacy of instructional materials and pupils' academic performance in Ayivuni sub-county

The government should consider providing more text books, charts to pupils as the available textbooks are not enough.

Policymakers in the MOEs and school administrators must create procedures that guarantee that teachers and pupils have access to sufficient teaching resources to improve pupils' academic performance. Additionally, policymakers must assess and strengthen the existing policies in order to increase the availability of educational resources and raise pupils' performance. Implementers especially teachers need to ensure that they follow prescribed policies such as appropriate use of text books and other instructional materials when teaching, and encourage parents to provide basic material to children in order to improve pupil's performance.

5.3.3 The relationship between training of teachers and pupils' academic performance in Ayivuni sub-county

The government should promote in-service training to help equip all teachers with enough skills that will help in improving pupils' performance.

In order to lower the high learner teacher ratios and thereby raise student performance in elementary schools, the MOEs must collaborate with the district service commission to hire and deploy more highly trained teachers. Additionally, the MOEs, schools, and other well-wishers should think about creating training opportunities to give teachers the modern skills needed to improve student performance.

5.4 Suggestions for further research

The report suggests the areas below for more investigation based on its findings:

The findings of this study should be used to implement effective interventions that can improve the academic performance of pupils in different areas.

There should be research done to identify additional variables that affect academic achievement. This is so that it is clear that other factors, as well as the implementation of UPE policy, also have an impact on students' academic achievement.

UPE policy involves funding, which was not looked at in this study yet funding is regarded as driver for school effectiveness and academic success. Therefore, more research might examine financing and student achievement in the Ayivuni sub-county.

There should be additional research done on the contribution of parents towards the pupils learning during Universal Primary Education programme because some parents still lacked knowledge about their responsibly

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Appendix 1: Questionnaire for Teachers and Head Teachers

This questionnaire is designed for the use in the study titled: *Implementation strategies of the Universal Primary Education policy and pupils' academic performance in Ayivuni sub-county*. You have been selected to participate in this study given your vast knowledge, experience and skills in primary education. You are requested to respond to each question thoughtfully and truthfully. There are no wrong or right answers. All responses were treated with utmost confidentiality and for the purpose of this study alone. Please do not write your name anywhere on this questionnaire. Please tick in the given boxes.

Part A: Teacher and head teachers background information

(Please tick, (√) *the appropriate boxes and fill in where necessary).*

1: Are you a Male or Female? Male ☐ Female ☐

2. How old are you? Less than 25 years ☐ 25-30 years ☐ 31-40 years ☐

41-50 years ☐ 51-60 years ☐ Above 61 years ☐

3. For how long have you served as a teacher? Less than 5 years ☐ 5-9year ☐

10-14years ☐ 15-19 years ☐ Above 19 years ☐

4. For how long have you served in this school? Less than 5 years ☐ 5-9year ☐

10-14years ☐ 15-19 years ☐ Above 19 years ☐

5. What is your highest education level?

Master's ☐ Bachelor's ☐ Diploma ☐

Grade III Certificate ☐ Others ☐ (Specify)…….

PART B: IMPLEMENTATION STRATEGIES OF THE UNIVERSAL PRIMARY EDUCATION POLICY

For each of the following statements please indicate (by ticking) the appropriate responses according to the following scale:

KEY: SD= Strongly disagree D= Disagree NI=No idea A= Agree SA= Strongly agree

No.	Statement	Responses				
		SD	D	N	A	SA
IMPROVEMENT OF PHYSICAL SCHOOL FACILITIES						
1.	In my school, classrooms have enough space for teachers to monitor pupils learning					
2	In my school, pupils in all classes have enough desks or chairs for sitting.					
3	In my school, there are enough latrine stances for pupils including those with disabilities.					
4	My school has permanent houses for at least four staff members.					
5	My school has a well-equipped library for learners and teachers to use.					
6	My school has adequate health and sanitation facilities for all pupils and teachers					
ADEQUACY OF INSTRUCTIONAL MATERIALS						

1	My school has got enough text books for all pupils.					
2	In my school all teachers are provided with teachers' guides					
3	My school has visuals, charts and real objects for demonstrations when teaching.					
4	My school provides enough writing materials for teachers.					
5	In my school, the pupils have enough writing materials.					
6	In my school, there are adequate chalk boards and chalks					
TRAI	TRAINING OF TEACHERS					
1	In my school all the teachers are trained and qualified.					
2	In my school teachers are invited for special trainings when there are changes in syllabi/curriculum					
3	My school has experienced teachers.					
4	The government provides workshop opportunities for the teachers in my school.					
5	In my school, teachers are allowed to upgrade when interested.					
6	In my school, teachers get opportunities to participate in refresher courses.					
No.	PUPILS' ACADEMIC PERFORMANCE	Responses				

	S	SD	D	N	A	SA
1	Learners in my class/ school actively participate in class activities					
2	In my class/ school pupils perform very well in class exercises					
3	Learners in my class/ school perform highly in homework assignments					
4	In my class/ school learners score high marks in monthly tests					
5	in my class/ school learners always score high marks in mock exams					
6	In my class/ school learner perform very well in PLE					

Appendix 2: Focus Group Discussions Questionnaire for Primary Seven Pupils

This FDGs questionnaire is designed for the use in the study titled: *Implementation strategies of the Universal Primary Education Policy and pupils' academic performance in Ayivuni Sub-County Arua district.* You have been selected to participate in this study and you are requested to respond to each question thoughtfully and truthfully. There are no wrong or right answers. All responses will be treated with utmost confidentiality and for the purpose of this study alone.

1) What are the different physical school facilities do you have in this school?
2) Are the available physical facilities enough for all students?
3) Do teachers in your school have enough instructional materials like text books, wall charts; chalk, exercise books, pencils, meter rule, mathematical sets maps and teaching aids?
4) Do pupils in your school have enough instructional materials like text books, wall charts; chalk, exercise books, pencils, meter rule, mathematical sets maps and teaching aids?
5) Do you have enough teachers for your class/school?
6) Are you aware on whether all teachers in your school are qualified?

Appendix 3: Interview guide for head teachers

1) Do you think there is a relationship between physical school facilities and pupils' academic performance in your school? Explain your answer.
2) Does your school have enough physical school facilities like classrooms, libraries, toilets and bathing shelters especially for girls, and not forgetting pupils with disabilities?
3) Do you think there is a relationship between adequacy of instructional materials and pupils' academic performance in your school? Explain your answer
4) Does the government provide workshop opportunities for the teachers in your school?
5) Do you think there is a relationship between training and retraining of teachers and pupils' academic performance in primary schools? Explain your answer?

Appendix 4: Observation checklist

1. Physical school facilities like: classrooms, libraries, toilets, bathing shelters, staff quarters.
2. Instructional materials that include: text books, charts, maps, chalkboards, blackboard rulers
3. The classrooms setting, teachers' arrival book, teachers' schemes and lesson plans, pupils' exercise books.

Appendix 5: Picture showing a library in a primary school

Appendix 6: Sample sizes (S) required for a given population sizes (N)

Martin E. Amin

Appendix A
Sample size (s) required for the given population sizes (N)

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	256	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384

Note : From R. V. Krejcie and D. W. Morgan(1970), Determining sample size for research activities, Educational and psychological measurement. 30, 608, Sage Publications.

Appendix 7: Introductory letter

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FACULTY OF EDUCATION
Department of Educational Planning and Management

DISTRICT EDUCATION OFFICER 10 DEC 2019 ARUA DISTRICT LOCAL GOVERNMENT

Date: 25th September 2019

TO WHOM IT MAY CONCERN

Dear Sir/Madam

RE: ALERU GLORIA-17/U/14309/GMED/PE

This is to certify that Aleru Gloria is a student in our department pursuing a Master of Education in Policy, Planning and Management. She is carrying out research as one of the requirements of the course. She requires data and any other information on the topic titled:

"Universal Primary Education Policy Implementation and Pupils' Academic Performance in Selected Primary Schools in Ayivu Sub-County, Arua District"

Any assistance accorded to her is highly welcome. She is strictly under instructions to use the data and any other information gathered for research purposes only.

Thank you.

Dr. George Wilson Kasule

HEAD OF DEPARTMENT, EDUCATIONAL PLANNING & MANAGEMENT