# THE INFLUENCE OF STUDY STYLES ON DISTANCE LEARNERS' PERFORMANCE: A CASE OF BACHELOR OF EDUCATION ARTS BY DISTANCE LEARNING, UNIVERSITY OF NAIROBI.

BY:

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IMPOP

A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF REQUIREMENT FOR AWARD OF DEGREE OF MASTER OF DISTANCE EDUCATION, UNIVERSITY OF NAIROBI.

## **DECLARATION**

This project report is my original work and has not been presented for a degree in any other University or Institution.

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## **DEDICATION**

This work is dedicated to my husband Fred Ingolo and my daughter Hope Anindo, my sons Bob Safu, Linus Ashuma and Allan Mwinami whose support, encouragement and challenge has enabled me to strive to reach this peak of intellectual pursuits.

## **ACKNOWLEDGEMENT**

I thank the Almighty God for having brought me up to this level. I am indebted to my supervisor Augustine Mwangi for his guidance throughout my project writing. I am also indebted to my lecturers of M.D.E department Professor David Macharia, Naomi Mwangi, Ann Ndiritu, and Juliana Munialo, of the University of Nairobi during my M Ed. Course work and project writing.

This work would also have been incomplete without the moral support and encouragement of my M. D.E. Classmates especially Jane Amondi Otieno and Patrick Lumumba whose criticisms also improved my work.

To you all, Thank you and may God bless you.

#### **ABSTRACT**

This study sought to establish different study styles for distance learners, specifically the study found out the extent to which collaborative study style influenced the learners' performance a case of bachelor of education arts by distance learning, University of Nairobi, the extent to which portable electronic media study style influenced learners' performance, a case of bachelor of education arts by distance learning, University of Nairobi and the extent to which internet - based study style influenced distance learners' performance, a case of bachelor of education arts by distance learning, University of Nairobi and the extent to which print media study style influenced the learners' performance, a case of bachelor of education arts by distance learning. Using a survey design, data was collected from students enrolled in courses offered through distance education at the University of Nairobi Kakamega Extra Mural Centre through questionnaires and an interview schedule administered to students and the resident lecturer respectively. The data was analyzed using quantitative and qualitative methods such as means; with the use of response, frequency and percentages. The results were presented in tables. Explanations of the respondents' response were discussed in detail. The study found out that distant education students used printed, collaborative learning and web based learning styles. These printed and collaborative learning were the most used styles. However, learning could be enhanced if web based learning was encouraged.

The study recommended that portable electronic media study style should be embraced to enhance distance education. It also recommended that group discussions be formally structured and face to face tutorials be accompanied by handouts.

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## **CHAPTER ONE**

#### INTRODUCTION

## 1.1: Background to the Study

Education has been globally recognized as a tool for enhancing national development (Hallak, 1990; Alam, 2007). Many authors see it as a major contributor to individual creativity, improved participation in economic, social and cultural development as well as a major promoter of social cohesion. According to Ngware (2002), investment in education increases the competitiveness of a nation, improves one's career path and earning power as well as his quality of life.

As a consequence of this fact, many nations are prioritizing educational initiatives that aim at increasing access to education by citizens. The formulation of the Education for All goals **in** Dakar and the Millennium Development Goals where universal primary education and the promotion of gender equity in education at all levels was emphasized are moves in this direction in the international arena (Soubbotina, 2004). Whereas the traditional mode of education where learning takes place within the confines of institutional walls has long been held as the best way of learning, distance education is fast gaining currency as an educational mode of delivery of learning experience to students (Bales, 1997; Makhakhane, 2007; Mayeku and Odera, 2011). This phenomenal growth in distance education stems from the fact that this mode of education defies the barriers of space and time enabling those who would have been restrained by demands and pressure of work and family to access education from any part of the world.

According to UNESCO (2006), distance education is becoming acceptable as a crucial part of the mainstream educational system both in developed and developing countries. This is because distance education increases opportunities for educational advancement in a cost effective manner through utilization of technological advances for people of all ages. Paragiotis and Chrysoula (2010) point out that it differs from the traditional learning mode since it relies on specially designed materials and modes of delivery to facilitate the learning

process. This mode of education has been utilized in many countries especially at higher education level. In the United States of America and the United Kingdom, the University of Georgia and the Open University (UK) have pioneered in facilitating this mode of education in those countries respectively (Oladejo, Adewole, Fagunwa and Arewa, 2010). In Asia, the Indira Gandhi National Open University of India and Open University of Japan lead the way in this endeavour. In Africa, the University of South Africa (UNISA) has pioneered this mode of education. Other African Open Universities include the National Open University of Nigeria and the Open University of Tanzania.

In Kenya, the School of Continuing and Distance Education of the University of Nairobi has been the leader in offering distance education since 1953 when it was a part of Makerere University College. It has since grown to its current stature where the school graduated 2,272 students with diplomas, bachelors and Masters degrees in 2011 (UoN, 2011). Other universities having distance education programmes include Kenyatta, Moi (Mayeku and Odera, 2011), Maseno, Inorero, Kenya Methodist, Mt. Kenya, Africa Nazarene and KCA Universities.

This exponential growth of distance education in universities in Kenya anses from the recommendations of the Kenya National Conference on Education and Training which emphasized increased access and equity in education where distance education was identified as one of the modes of achieving that endevour (MOEST, 2003). The Kenya Vision 2030 also identifies education and training as one of the major drivers of transforming Kenya into a newly industrialized country the year 2030 (GOK, 2007).

The success of distance education programmes is dependent on the way in which they are prepared and delivered. According to Juma (2004), distance education study styles include print, video, institution based where group discussion and learner takes place and computer aided or web based styles. The planning and organizing of instructional materials for distance education to a certain extent influences the effectiveness of this mode of education (Omoregie and Jackson, 1996). However, in order to enhance student performance, the Distance Education study styles are used. To transmit these planned and organized materials goes a

long way in ensuring the success of this mode of education. The Distance Education study styles used differ from one university to another. Whereas some emphasize computer internate study styles

(Kelly &Stevens, 2009), others emphasize the need to embrace and combine the various study styles by Juma (2004).

#### 1.2 Statement of the Problem

Distance education has been accepted as an important medium of delivering education and enabling learners to acquire desired knowledge, skills, attitudes and qualifications. It is considered convenient, flexible, affordable and accessible (Kelly and Stevens, 2009; Makhakhane, 2007). As a result, many people who would have otherwise been constrained by their work schedules, distance or family commitments have gotten opportunities to improve their knowledge, skills and qualifications as well as climb the career ladder.

Despite this success, researchers highlight bottlenecks that bog down students' performance in distance education. According to Usun (2004) lack of student interaction with the tutors to get advice and feedback and problems related to audio visual aids influences effectiveness of the programmes. Other studies cite quality and content of course materials as influencing student performance (Makhakhane, 2007). Unless these issues related to study styles are addressed students' performance in particular and distance education programes in general will be affected. Whereas a lot of research has been done on distance learning, most of it has focused on the learner support services and how they influence distance learning effectiveness (Makhakhane, 2007; Omoregie and Jackson, ; Darikwa and Mazibuko, 2000; USun, 2004). Those studies done in Kenya on the issue have focused on policy guidelines and challenges in distance education (Juma, 2004; Mayeku and Odera, 2011).

Few studies have addressed distance education study styles. This is despite the fact that distance education programmes may be well designed and planned but unless they are properly delivered to the learners, their effectiveness will be questionable. After the distance learners are through with the face to face tutorials with their lecturers, they are left to go home

with nobody to follow up to see how they study. An empirical gap in information on Distance learners' study styles and the extent to which they influence distance learners' performance therefore exists.

## 1.3 Purpose of the study

The purpose of the study was to establish the influence of study styles on distance learners' performance, a case of bachelor of education arts by distance learning university of Nairobi.

## 1.4 Objectives

The objectives of the study were;

- 1. To establish the extent to which collaborative learning influences distance learners' performance.
- 11. To establish the extent to which the use of Portable Electronic Media influences distance learners' performance.
- 115. To examine the extent to which the use of Internet based study style influences distance learners' performance.
- **iv.** To establish the extent to which the use of print media study style influences distance learner' performance.

## 1.5 Research Questions

The research questions were;

- 1. To what extent does collaborative learning study style influence distance learners' performance?
- 11. To what extent does a portable electronic medium study style influence distance learners' performance?
- 111. To what extent does internet based study style influence distance learners' performance?
- **iv.** To what extent does a print medium study style influence distance learners' performance?

## 1.6 Significance of the study

This study was important because its findings provided distance education institutions with information on the best combinations of distance learners' study styles that enhance learning. This will assist them to improve their content delivery modes hence ensuring superior performance of their students. It will also enable policy makers and government departments involved in education and training to come up with policies that will encourage the development of appropriate study styles of distance education. Students of distance education will also benefit from improved study styles systems as a result of the study. Finally, the results have also contributed to the already existing body of knowledge on distance education.

#### 1. 7 Limitations of the study

In an ideal situation, this study should have been carried out in all universities offering distance education in Kenya. However, due to time and financial constraints, the study focused on students registered in such programmes at the University of Nairobi's School of Continuing and Distance education at the Kakamega Extra Mural Centre.

#### 1.8 Delimitation of the Study

The study limited itself only to the University of Nairobi Bachelor of Education Arts distance learners. The study confined itself to Bachelor of Education Arts students enrolled by distance learners at Kakamega Extra Mural Centre. The sample size taken was 120 students from the accessible population of 400 students. The study sampled out Part I students the year 2012 as 45 students, Part 11 -2012, 60 students, Part IIII; 2012, 70 students, Part IV- 2012,65 students, Part V; 2012,95 students and Part VI; 2012,65 students.

## 1.9 Definitions of significant terms

**Distance learners 'performance;-** The extent to which the learner exhibits the desired outcomes in terms of performance and attitudes.

**Study styles-** study habits of acquiring knowledge, skills and attitudes. The learners use printed materials, collaborative learning, portable electronic media and internet based

materials.

**Distance learners** -The learners who are physically separated from their lecturers, university and fellow learners by time and space. They use technology often in concert with face to face communication to bridge the instructional gap.

**Learners' performance-** The outcome of providing education to distance learners

Education - Process of acquiring the desired knowledge, skills and attitudes

**Collaborative learning-** a collection of two or more individuals who interact or come together to accomplish a given goal.

**Portable electronic media-** This contains various educational content of different subjects. They comprise of recorded audio visual or video tapes.

**Internet based-** This is the use of e-messages, e-mails and sometimes video conferencing to actualize the learning process. It is also e-learning.

**Print media -** study materials are prepared in the form of printed text books, study guides, workbooks, case study, course syllabi and modules ready for use by the students.

## 1.10 Organization of the study

This study comprises of 5 chapters. Chapter one discussed a background of the study, stated the statement of the problem, identified the purpose of the study, highlighted its objectives, research questions and significance of the study. It also identified its limitations and its delimitations. It showed the definition of difficult terms and organization of the study.

Chapter two comprises of literature review which discussed the objectives i.e. collaborative study style, portable electronic media, internet-based and print media style. It also discussed about learners' performance critical review, conceptual framework and gave a summary of the chapter.

Chapter three comprises of the study area, research design, target population sample size and sampling procedures, research instruments data collection and data analysis.

Chapter 4 comprises of data analysis presentation and interpretation of findings .It discussed the Questionnaire Return rate, demographic characteristics of the respondents the explanation of the respondents on collaborative study style, portable electronic media style, internet style and print media style with their frequencies ,percentages and mean. It also discussed the response on learners' performance, challenges facing Distance learning delivery system and summarized the chapter.

Chapter 5 comprises of summary of findings, discussions, conclusion and recommendation in detail.

In summary of findings the students adopted various study styles, the printed, collaborative portable media electronic and internet based study styles.

In discussion of findings the study found out that portable electronic media style was not used in the University of Nairobi Bachelor of Education (Arts) distance education programs.

In conclusion, the study found that out that use of printed material, internet based and collaborative study styles influenced distance learners performance. Portable electronic media style did not influence their performance.

In recommendation the study recommended that the Universities offering Distance Education should incorporate the use of portable electronic media, to enhance perform and the use of discussion groups should be fostered.

## **CHAPTER TWO**

## LITERATURE REVIEW

## 2.1 Introduction

This chapter reviewed literature related to various distance learners' study styles and learners' performance. It specifically looked at printed materials study style, collaborative learning study style, portable electronic media study style and internet-based study style and the extent to which they influenced distance learners' performance. Learners' performance was addressed from pass rates, positive attitude and acquisition of knowledge and skills perspectives.

## 2.2 Definition of Distance Education

According to McIsaac and Gunawardena (200 l), distance education can be defined as a form of structured learning in which the student and instructor are separated by time and space. This definition was improved by UNESCO (2006) who defined distance education as an approach that focuses on opening access to education and training provision, freeing learners from the constraints of time and place and offering flexible learning opportunities to individuals and groups of learners.

This study defines Distance Education as teaching and learning situations that occurs where the learner and the lecturer are separated from one another most of the time and therefore have to use a variety of strategies and study styles to overcome space and time separation.

# 2.3 Objectives of Distance Education

Traditional modes of delivering education have had a limiting effect in enabling many people constrained by work and location to attend such face to face undertakings (Kelly and Stephens, 2009). This has led to those keen on enhancing their capabilities and acquiring more knowledge and skills through education to seek alternatives. As documented by Race (1994), Usun (2004) and Kelly and Stephens (2009), Distance education has gained popularity as the alternative way of ensuring that the growing demands for education and training is met. It has

been documented that the number of students enrolling in distance education and that of universities offering distance education has been on the rise (Middle - hurst and Woodfield, 2004). This rapid growth appears to be a fulfillment of some of the main objectives of distance education.

According to UNESCO (2006), some of the objectives of distance education which have contributed to the success and expansion of distance education include:

The need to ensure lifelong education by multiplying entry points to learning and training opportunities. Provision of increased opportunities for updating, retraining and personal enrichment for learners. Improving cost effectiveness of education resources. Enhancing the quality of existing educational services. Extending geographical access to education and balancing inequalities between age groups. Providing speedy and efficient training for key target groups and utilizing technological advances to teach more subjects at a distance.

# 2.4 Collaborative learning study style

Distance education study styles are part of the distance education system that consists of a complex array of infrastructure and personnel (Locke, Moore and Burton, 2002). This study defines distance education study styles as the modes of learning used by distance learners to acquire the desired knowledge, skills and attitude. Distance learners use different modes of study styles or a combination of several styles. According to Juma (2004), the most commonly used modes in Kenya include: Print based materials, collaborative learning study style, internet based mode as well as pre-recorded videos. Each of these modes serves a particular purpose and is beneficial to the distance education learner in ensuring that concepts are grasped and learning takes place.

A group can be defined as a collection of two or more individuals who interact or come together to accomplish a given goal (Gibson 2001). Group members are expected to mutually influence each other as they pursue the attainment of the goal.

From distance educational perspective, collaborative learning can be used as a style of studying where members come together to discuss study topics or subjects to enhance their

understanding of the subject matter they may have learnt during face to tutorials or from printed materials. For effectiveness of the group, members have to be carefully selected in that they should have commonalities. For example group members should be those undertaking a similar course of study (Wilson 2000 Read and Welch, 1998).

Members of the group have to focus on discussion issues and share tasks to be accomplished with members contributing based on their accomplishment of tasks assigned. for example each member can research on a different topical area which he/she will present during a formal group meeting and lead the discussion on the same. Group members are expected to possess listening, critical thinking and analytical skills (Wilson, 2000).

Cooperative learning suggests that faculty teachers/tutors should interact with learners to know how students think in order to prescribe more interactions. This faculty student interaction will make learners' misconceptions clearer because faculty learner interaction will highlight inconsistencies within learners and consequences of learners' misconceptions.

Collaborative learning ensures that there is cooperative effort between faculty and student to facilitate learning. Education is a collaborative process and distance education and online education courses must incorporate collaborative features in instructional materials.

Collaborative learning uses reflective teaching strategies. This method tests student understanding and use results for diagnostic assessment (Laurillard 1997).

In collaborative learning learners must reflect on goal action and feedback on academic knowledge. This ensures no time is wasted.

In collaborative study style internalization is facilitated by practical activities such as memorization, drill exercises, questions needing immediate answers to reach the learners' short-term memory and later long-term memory.

When well utilized in distance education, group discussions help to make clear subject matter that has been taught during face to face tutorials, allows for those who understand concepts

better to share the knowledge with others and get additional examples that enhance the understanding of what was intended by the course.

## 2.5 Portable electronic media study style

Distance education content can also be acquired by the learner through portable electronic media. Distance learners buy recorded audio visual video from the course instructors delivering the course content (Usun, 2004; Omoregie and Jackson, 1996). The video tape is then sold to learners registered for the specific course for them to have the lessons through watching the presentation at their own time and comfort.

This mode of distance education study styles has been hailed for concretizing the learner tutor interaction which although one-way, is actualized. The learner ends up having an image of the tutor, his presentation skills and also gets explanations that would not have been written in printed materials. The learner also gets to have visual access to certain materials, geographical locations and features, motional objects and images that would not have been captured were the study style different (Becker, 2004). It therefore brings immediacy to the learning experience.

Designing, recording and presenting pre-recorded videos to learners however poses a change to many educational institutions utilizing this method. The lecturer/tutor must be properly trained in use of techniques of teaching a relation with technological devices used such as the need to maintain eye contact with the camera (Darkwa and Mazibuko, 2000). This method may also make the student to incur extra costs since he/she will be required to have a television screen and video decoder for the successful attendance of the learning session.

It also suffers the disadvantages of being a one-way communication methodology of distance education delivery that reduces the learner to be a passive participant in the lessons. In recent times, many institutions are embracing video conferencing systems to overcome this barrier (Donkor, 2010). Other critics hold that images on television screens may be distracting or depending on how boring or interesting they are, one may end up bored or asleep, thus negative the learning purpose (Backer, 2004). Other people may interrupt the lesson since it

may be difficult for the learner to convince others that by watching the pre-recorded lessons, he or she is studying.

This method is however also advantageous. It breaks monotony in the learning process especially where the learner uses other study styles of distance education study style such as printed materials. He/She also learns in a relaxed atmosphere such as one's living room and he/she can rewind the presentation at any point so as to hear or view issues that require keen observation or listening (Becker, 2004). Given that this mode of distance education study style is used many African Universities offering distance education, an analysis of its effectiveness in enhancing learning is important.

## 2.6 Internet based study style

Advancement in computer technology has resulted in distance education providers to embrace this platform as a delivery method of distance education (Juma, 2004; Lockee, Moore and Burton, 2002; UNESCO, 2006). This is informed by the fact that web-based methodologies can be real time, hence enhance interaction between the learner and the tutor as well as other learners. According to Kelly and Stephens (2009), e-learning which is web based utilizes emessages, e-mails and sometimes video conferencing to actualize the learning process.

The biggest benefit of e-learning however, is that it eliminates the expense and in convenience of getting the lecturer and the learner in the same place. Opting for e-learning means that course can be paced into shorter sessions and spaced out over several days or weeks that the learner would not loose.

Such methodology has the advantage of also bringing cost savings to the distance education provider that would have come as a result of using printed materials. The materials posted on websites for students usage can also be easily updated with the students questions and clarification requests concerning the courses being answered promptly by the course instructors. (Small wood and Zargari, 2000). A large number of students in different location in the world can also access course materials and clarifications without leaving their locations.

Other advantages of computers are that computers can facilitate self-spaced learning. In the computer assisted instruction (CAI) computers individualize leaning while giving immediate reinforcement and feedback to the learners. Computers are multimedia tool. With integrated graphic, print, audio, and video capabilities, can be incorporated into computer-based instructional units, lessons, and learning environment.

Computers are interactive. Micro-computer systems incorporating various software packages are extremely flexible and maximize learner control. Computer technology is rapidly advancing: Innovations are constantly emerging, while related costs drop. By understanding their present needs and future technical requirements, the cost conscious educator can effectively navigate the volatile computer hardware and software market. Computers increase access. Local, regional and national networks link resources and individuals, wherever they might be. In fact, many institutions now offer computer undergraduate and graduate programs relying almost exclusively on computer based resources.

This mode of distance learners' study style however has its short comings. Just as the video method, it requires the student to have access to a computer, something which may be expensive to the learner (Kelly and Stephens, 2009, Usun, 2004). The student should also possess the requisite computer skills and have internet connectivity. The internet may also be distractive to the student where the student may visit other web sites unrelated to his/her studies hence waste his study time.

The methodology poses user interface and unfamiliarity. Uneasiness with the computer is common among learners. Due to students' unfamiliarity with computers, the incompetence may affect their level of frustration. Many students have problems in obtaining information of interest. This could be as a result of poor information search criteria, failure to articulate keyword for information search and retrieval. This could lead to students' frustrations in an online. On web-based distant learners do not see each other or their lecturers, the absence of physical cues lead to some frustrations among students. Students may also not get sufficient feedback.

Students may fail to make time to read and post e-mail during discussion periods. Others may even not read already posted articles before posting their write-ups or questions for discussions. E-mail messages may be overwhelming to students, appearing too many to read and respond to. E-mail messages may switch a student's focus from more important mails to more entertaining ones especially subscribed newsletters about their areas of interest.

Computer networks are costly to develop. It is costly to develop instructional networks and purchase the system software to run them.

The technology is changing rapidly. Computer technology evolves so quickly that the distant educator is focused solely on innovation not meeting the tangible needs of the learner. The educator constantly changes equipment in an effort to keep pace with the tested technical advancements. Widespread computer illiteracy still exists. While computers have been widely used since the 1960's, there are many who do not have access to computers or computer networks. Students must be highly motivated and proficient in computer operation before they can successfully function in a computer-based learning environment.

Many institutions have however embraced this distance education study styles due to its costs availability and versatility hence making it an inevitable mode of distance education delivery. A careful study of its effectiveness in learning is therefore paramount.

# 2.7 Printed Materials study style

Printed materials have been frequently used in distance education for a long time (Hampton, 2001). They are considered the foundation of distance education and the basis from which all other study styles have evolved. The first distance delivered courses were offered by correspondence study, with print materials sent and returned to students by mail. While technological developments have added to the repertoire of tools available to the distance educator, print continues to be a significant component of all distance education programs.

This distance education study style involves study material being prepared in the form of printed textbooks, study guides, work books, case studies, course syllabi and modules which are then sent to students (Misanchuk, 1994). The printed material requires a lot of effort, care

and skill in preparation. The course instructor prepares the study materials in such a way that the learner will be able to progressively go through the various topics, exercises, related readings and additional resources. In most instances, guises are also included for the student to conduct self assessment. This enables the learner to prepare questions and seek clarifications from course instructors during face to face sessions with lecturers.

The use of print as a mode of distance education delivery has many benefits; printed distance education learning materials can be used in any setting without the need for presentation equipment. According to Becker (2004) the learner is able to get an overview of what the course entails by checking forward or backwards to see what is covered in the study pack, text book or module. This makes them easy to use easy and reference. Printed instructional materials are also cost effective since they are inexpensive to duplicate hence can reach more people (Middlehurst and Woodfield, 2004; McIsaacs and Gunawardena, 2001). Such material is also easily edited and revised depending on feedback from the learners.

Print materials can be used in any setting without the need for sophisticated presentation equipment. Print as a media of delivery is the most transparent instructional medium of all. This kind of delivery is non-threatening to the learner. Reading is second nature to most students. As a result, they are easily able to focus on the content, without becoming mesmerized or frustrated by the process of reading itself.

Print materials are easy to use. Given adequate light, print materials can be used any time and any place without the aid of supplemented resources such as electricity, viewing screen and specially designed electronic classrooms. The portability of print is especially important for rural learners with limited access to advanced technology.

Print is also easily reviewed and referenced. Print materials are typically learner-controlled. As a result, the student rapidly moves through redundant sections, while focusing in areas demanding additional attention. This kind of study style is time-effective. When instructional print materials are created, the developer's primary focus remains on content concerns, not the technical requirements of the delivery system.

Printed materials mode of distance education study styles has however been criticized for being passive and self directed. It does not stimulate the learner the wayan audio visual program of face to face tutorial mode of delivery would have done (Hampton, 2002) other scholars hold that it is highly dependent on a person having reading skills. Lack of ability in reading skills may therefore render this mode redundant. Another criticism of this method is that it lacks mechanisms of giving immediate feedback to the lecturer about the learner. Print has a limited view of reality. Print, by its reliance on the written word, offers a vicarious view of reality. Despite the use of excellent sequential illustrations or photos, for example, it is impossible to adequately recreate innovation in print.

Print media as study style is passive and self-directed. Numerous studies have shown that higher motivation is required to successfully complete print-based courses. To a certain extent, the passive nature of print can be offset by systematic instructional design that seeks to stimulate the passive learners. Still, it takes more motivation to read a book or work through a television program or participate in an audio conference with an instructor encouraging student participation and response.

An evaluation of the effectiveness of printed materials system of Distance education delivery in learners' performance can determine the usefulness of this mode of education delivery (Lockee, Moore and Burton, 2002).

## 2.8 Learners' Performance

Education provided to learners seeks to ensure it equips the learner with knowledge, skills, attitudes and abilities to enable them cope with their environment according to Lockee, Moore and Burton (2002), an evaluation of an education process can determine to what extent learner exhibits the desired outcomes in terms of performance and attitudes.

Periodic assessment" should be done to determine learners' performance (AACSB International, 2007). Learners' performance can be measured using various methods such as graded assignments, projects, continuous assessment tests and written examination among others

(Lockee, Mooreand Burton, 2002, Moree et al, 2006). Assessment refers to the measuring of learners' performance either before or after a teaching intervention or both.

According to Stanfield et al (2004) learners' performance can be gauged based on the extent to which the experience of learning has changed them In a meaningful fashion. This means that their should be a difference in their perception of different aspects of reality Olmsted(2008) on his part sees learners performance from a change of both knowledge and skills as well as acquisition of a positive attitude. To him learners' satisfaction with the learning process is equally important as the knowledge and skills gained by them.

In the university set up, most institution offer assessments to gauge the extent to which learners' has grasped concept in the form of term papers, continuous assessment test, class presentations and end of semester examinations. From these assessments, the learners' performance can be presented based on various measures such as their pass rates, acquisition of knowledge and skills as well as positive attitudes.

## 2.9 Critical Review

Research has shown that distance learners performance at the University is influenced by different factors. These include availability of learner support services, learners' characteristics such as learners' abilities as well as the use of various distance education study styles. Whereas a lot of research has been done on effects of learner support services and learner characteristics on distance learners' performance (Usun, 2004; Stanfield et al, 2004; Oladejo et al, 2010), few studies have highlighted how distance education study styles influence learners performance. Few studies done on this area have only identified these distance learning study styles (Juma, 2004; Mayeku and Odera, 2011).

The study therefore sought to critically analyze the influence of study styles on distance learners'. It was guided by the constructivist learning theory. This theory holds that learners construct their own understanding of the world around them by fitting their perceptions of the world into existing knowledge and understanding (Komulainen and Natsheh, 2008). The learning environment including methodologies of learning should be specifically tailored to ensure learners construct desired knowledge hence get desired outcomes.

# 2.10 Conceptual Framework

Based on the reviewed literature and guided by the constructivist theory, the study conceptualized that Learners' performance was influenced by distance learners' study styles. The relationship between Distance Education study styles and learners' performance was to be moderated by the individual learners' personal characteristics such as his/her age, experience and gender. This conceptualization was graphically presented in figure 1

# **Independent variables**

**Dependent variables** 

Collaborative learning study style

Portable electronic study style

1---- Learners' Performance

Internet based study style

Print media learning style

Moderating variables

Personal Characteristics
Age. Experience.
Gender.

Fig. 1 Conceptual Relationship between study variables

Collaborative learning style. When well utilized, collaborative learning helps to make clear subject matter that has been taught during face to face tutorials. It allows for those who understand the concepts better to share the knowledge with others and get additional examples that enhance the understanding of what was intended by the course. The above combined with

listening, critical thinking and analytical skills that distance learners possess, affect their performance. The distance learners are able to write Term papers. Cats and their end of semester exams without difficulties. They also acquire the skill of sharing and good attitudes towards distance learning hence high performance. Some factors like age also affect performance. The young students sometimes do not enjoy discussions with the old ones.

Portable electronic media study style has been hailed for concretizing the learner-tutor interaction. Learners buy the video tapes which contain the required content. Some learners get them from their lecturers. The learner ends up having an image of the tutor, his presentation skills and also gets explanation that would not have been written in printed materials. The learner also gets to have visual access to certain materials, geographical locations and features, motional objects and images that would not have would not have been captured were the study style different. This therefore brings immediacy to the learning experience hence high performance. The style enables the learner to learn in a relaxed atmosphere such as one's living room and he\she can rewind the presentation at any point so as to hear or view issues that require keen observation or listening. Learners who are constrained by their families are able to acquire knowledge, skills and attitudes and as a result there is high performance.

Internet based style enhances interaction between the learner and the tutor as well as other learners. The methodology brings cost savings to the distance learners that would have come as a result of using print materials. The learners access course materials and clarification without leaving their locations. Updated materials from website help students to prepare thoroughly for their exams and also acquire skills to operate the internet. Leamer characteristics such as gender and age affect performance. Some women learners are not comfortable with the use of internet hence slower in the acquisition of knowledge, skills and attitudes.

Print materials are prepared in a way that the learner is able to progressively go through the various topics, exercises, and additional resources. Guides are also included for the student to conduct self-assessment. This helps students to prepare questions and seek clarification from course instructors during face to face sessions with their lecturer hence good performance.

# **2.11 Summary**

The literature reviewed shows that various study styles, the collaborative learning study style, the portable electronic media study style, the internet-based style and the print media study style are available for use by distance learners to enhance their performance.

Collaborative study style when well utilized enhances understanding in distance education. Portable electronic media style is seen easening learning to take place anywhere and at any time. Internet-based study is seen bringing cost saving. Traveling distances are cut short by this method. Print media study style has advantages of permanence. Learners refer to it at any

.time; it can be stored for thousands of years. However, the effectiveness of these may be hampered by personal characteristics of the learners such as age experience, gender etc.

## **CHAPTER THREE**

## RESEARCH METHODOLOGY

## 3.1 Introduction

This section looked into the procedures and methods that have been used to obtain, analyze and present data. Specifically, it included the study area, research design, target population, sample size and sampling procedures, research instruments, data collection, data analysis and summary.

# 3.2 Study Area

This study was conducted at the University of Nairobi, Kakamega Extra Mural Centre. This centre is in the Western regional centre for the School of Continuing and Distance Education of the University of Nairobi. It offers a variety of courses from Diploma to Masters Degree level to students through the Distance Learning mode of education delivery. Amongst the courses offered is the Bachelor of Education (Arts) course. The centre serves Kakamega, Bungoma, Busia and Vihiga counties

## 3.3 Research Design

The study was conducted using the survey design. According to Nsubuga (2000), survey design involves a researcher making an intensive investigation of a social unit to gather pertinent data, analyze the interrelationships of various factors and make conclusions. This study sought to investigate the influence of study styles on distance learners' performance. By studying The University of Nairobi Distance education Program study styles in details, conclusions were made about their effectiveness.

# 3.4 Target Population

The Target population of this study was about all students enrolled in the Bachelor of Education (Arts) degree at the University of Nairobi Kakamega Extra Mural Centre. This group comprised of 400 students. This group of students undertake this study through distance learning which uses various distance study styles. These learners are grouped in six parts i.e r.n, III, IV, V, VI.

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## 3.5 Sample Size and Sampling procedures

The study chose a sample of 120 students from the accessible population. This represented 30% of the population, which is above suggested views of the sample being ten percent of the accessible population in descriptive studies (Gay as quoted in Mugenda and Mugenda,1999) This was done using stratified sampling to ensure students in each year of study were proportionally represented. The sample from each course was then chosen using simple random sampling as seen on Table 3.1.

Table 3.1: Sample size

Year	Parts	No. of students	Out of
2012	I	14	45
2012	II	20	60
2012	Ш	18	65
2012	IV	18	65
2012	V	30	90
2012	VI	18	65
TOTAL	6	120	400

The researcher personally administered the questionnaire on the respondents.

# 3.6 Research Instruments

The study used questionnaires and interview to collect the data. The questionnaires had structured and open ended items. It was divided into two parts with the first part seeking respondents' personal details while the second part sought information on the influence of study styles on learner's performance.

Interview schedules was also administered on the resident lecturer to seek information on the modes of distance learning used in the university, the last one had questions about the variables, the benefits and challenges of using different study styles and suggestions for improvement of the current study styles in use.

This method was appropriate for respondents given that they were literate. The information needed was provided in writing COso and Onen, 2005).

Table 3.2: Shows the number of learners who were sampled for the study from Kakamega Extra Mural Centre the year 2012 from part I - part VI

YEAR	PART	NO. OF STUDENTS	OUT OF					
	SAMPLED							
2012	I	1 4	45	11.25%				
2012	 	2 0	60	15%				
2012	II I	2 0	70	17.5%				
2012	IV	1 8	65	16.25%				
2012	V	30	95	23.75%				
2012	VI	1	65	16.25%				
TOTAL	SIX	8 <b>120</b>	400	30%				

# **3.6.1** Validity of Research Instruments

Validity is the extend to which a research instrument measures what it was intended to measure (Nsubuga, 2000; Mugenda, 2008).

The study sought suggestions on improvement of the research instruments from colleagues, senior researchers and academicians at university of Nairobi. The corrections noted were incorporated as much as possible and the instruments fine tuned.

## 3.6.2 Reliability of Research instrument

Reliability is the extend to which a given instrument yields consistently the same results when repeated measurements are taken from the same subjects in a research under the same conditions (Kombo and Trom 2006; Mutai, 2006)

To ensure reliability the study conducted a pilot study at Kenyatta University open learning centre in Kakamega.

The scores obtained from Kenyatta University respondents were then correlated using the statistical programme for social Sciences (SPSS) where the cronbach is coefficient Alpha was computed at 95% confidence level. This helped to establish consistency among the items in measuring the concepts on interest. The Cronbach alpha coefficient for the questionnaire items was 0.805. This was above the minimum 0.7 level suggested by Hair et al (2006). This therefore showed that the data collection instrument was reliable.

## 3.7 Data Collection

Data was collected from both primary and secondary sources. Secondary data was obtained through document analysis of records from the University of Nairobi. Primary data was collected using structured questionnaires and interview schedules. These were administered on students and the resident lecturer. The researcher used the drop and pick later method where questionnaires were given to chosen respondents. They were accorded adequate time to fill and the researcher picked the completed questionnaires later. For interview the researcher booked an appointment with the resident lecturer whom she visited at the appointed time and conducted the interview.

## 3.8 Data Analysis

Data analysis was done using both quantitative and qualitative methods. The data collected was edited, coded and then analyzed using the SPSS computer program. Descriptive data analysis techniques comprising of means, median, mode, range and standard deviation was used to measure central tendencies and dispersion where applicable. It was then presented in tables, in terms of frequencies and percentages.

## **3.9** Operationalization of variable Table

**Table 3.3: Operationalization table** 

BJECTIVE	VARIABLES INDICATORS	MEASUREMENT	MEASURIN G SCALE	TOOL ANALY	
				GSCALE	-SIS
o establish extent to ch llaborative ing study le menced stance errormance, helor of ucation arts distance /emling, mriversityof Nairobi.	IndeQendent  Group discussion  DeJ2endent  -Learners performance	Reported participation in group discussion  Dependent  Reported benefit of group discussion.	Improved socialization.	Interval scale	-Means
To establish dilicextent to which rable electronic media study ellyle influenced mstance elearners' wformance, Oachelor of coucation arts for distance elearning, University of	IndeJ2endent  Portable electronic media e.g. video tapes  CDs DVDs  DeJ2endent  Learners' performance	Availability of pre-recorded videos  Use of pre-recorded video  Effect on performance	Acquisition of knowledge.  Good handling and use of portable electronic media.	Interval scale	-Means
Nairobi. To establish lie extent to which the use of internet	IndeJ2endent internet based learning	-Possession of computer skills - Usage of web based materials	Operation of computer technology	Interval scale	-Means

Dependent mfluenced Learners distance performance learners' per ormanc e, helor of **Vucation** Interval scale earts Acquisition of Usage of Independent distablish knowledge modules and he example nt to text books. Printed 'ch the Materials e.g. use print Appreciation of modules and media le contents. textbooks duenced study guides, mstance -Adequacy of work books, learn ers' contents of case studies **Prformanc** books or syllabi hae, helor materials. of Dependent ucation arts Learners ~y performance distance

-Means

learning, universit

y of 3.10 Summary
Nairobi.
This chapter highlighted the study area which was Kakamega Extra-mural Centre found in Western regional centre, centre for school of Continuing and Distance Education. The research design used was survey design which was administered on the learners study styles and conclusions were made about their effectiveness.

The target population was about all students enrolled in the Bachelor of Education (Arts) degree in the University of Nairobi found in Kakamega Extra Mural centre. This was to be all parts i.e. from part 1 to part 6 which totalized to 400 students. The sample size was 120 students out of the total 400.

The study used stratified and random sampling to ensure students in each course were proportionally represented. The research instruments used were questiOlmaires and interview which were administered to the learners and resident lecturers respectively.

Data was collected from both primary and secondary sources. The researcher therefore used the drop and pick later method which accorded the respondents adequate time. The researcher booked appointment with the resident lecturer.

Data was then analyzed using both quantitative and qualitative methods, it was edited, coded using spss computer program. It was then presented in tables, in terms of frequencies and percentages.

#### DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

#### 4.1 Introduction

This chapter presents the study response rate, analysis of data and interpretation of study findings. They were aimed at establishing the influence of study styles on distance learners' performance among students undertaking the bachelor of education [Arts] degree by distance learning of the University of Nairobi.

#### **4.2 Questionnaire return rate**

Data was collected from 104 respondents who were students undertaking Bachelor of Education (Arts) degree at the Kakamega Extra Mural Centre of the University of Nairobi out of the chosen sample of 120 respondents. This represented a response rate of 86.7%. The findings of the study are presented in the subsection that follows.

#### 4.3 Demographic Characteristics of the Respondents

The study collected data on the demographic characteristics of respondents. This was seen in terms of respondents' gender, academic qualifications, employment status and year of study.

#### **4.3.1 Gender**

A majority of the respondents were male [65.4%] while females were 34.6%. This indicates that more males than females are undertaking the Bachelor of Education [Arts] degree by distance learning as shown on Table 4.1.

**Table4.1 Gender of respondents** 

Gender	Frequency	Percentage
Male	6	65.4
Female	8	34.6
Total	<b>104</b> 3	100
	6	

This is despite the fact that a formative action having been undertaken in most spheres of the economy including institutions of higher learning.

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### 4.3.2 Age

The study findings indicate that a majority of the respondents were aged between 25 and 34 years as seen on Table 4.2

Table 4.2 Age of Respondents

Age bracket	Frequency	Percentage
Below 25 years	12	11.5
25-34 years	68	65.4
35- 44 years	24	23.1
Total	104	100

Those aged between 35 and 44 years were 33.1 %.

The findings show that many middle aged people are pursuing further studies

#### 4.3.3 Academic qualifications

The findings of the study indicated that most of the respondents (80.8 %) had certificate level qualification in education.

As seen on table 4.3, these certificate holders had PI qualifications, a certificate given to primary school teachers who had undergone two year training in primary education at a teachers college.

Table 4.3 Highest Academic Qualifications of Respondents

Qualification	Frequency	Percentage
Secondary Certificate	8	7.7
PI Certificate	84	80.8
Diploma	12	11.5
Total	104	100

Only a few respondents (7.7 %) had secondary school certificate as their highest academic qualifications.

## **4.3.4** Employment status

The study findings showed that 90.4% of the respondents were working as seen in Table 4.4

**Table 4.4 Employment status** 

Are employed/ working	Frequency	Percentage
Ye	94	90.4
S	10	9.6
No		

This shows that most respondents were already working hence were undertaking studies to improve their qualifications.

#### 4.3.5 Year of study

The respondents of the study were drawn from all the stages of Bachelor of education (Arts) programme as seen on Table 4.5.

Table 4.5 Parts/stages of study

Parts	Frequency	Percentage
1	24	23.1
2	36	34.6
3	28	26.9
4	08	7.7
5	08	7.7
6	00	00
Total	104	100

Most of the respondents came from part one (23.1 %), pari two (34.6 %) and part three 26.9 %. There were a few respondents from part four and five while none from part six.

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#### 4.4 Collaborative learning study style

The study identified four study styles that are globally used in distance education. These include: Use of collaborative learning such as group discussion, use of portable electronic media such as videos, use of internet based resources such as the internet and email and the use of printed materials such as books and modules.

The study sought to find out if the respondents participated in collaborative learning through the use of group discussions study style. In response to the question of whether they had taken part in group discussions, a majority of the respondents (76.9%) responded in the affirmative while only (23.1 %) said they had not. They however differed on how regularly they attended such discussion meetings as seen on Table 4.6.

Table 4.6 Always participated in group discussions.

Response	Frequency	Percentage	Mean
Strongly agree	20	19.2	3.38
Agree	20	19.2	
F airl y agree	44	42.3	
Disagree	20	19.2	
Strongly disagree	0	0	
Total	104	100	

The findings show that (19.2%) of the respondents disagreed with the statement while (42.3%) fairly agreed with it. This shows that although the students were in agreement about the importance of this study style, many of them had not regularly attended such meetings due to a variety of reasons. This may be attributed to their nature of being mature students aged above years as seen on Table 4.6 which may make them concentrate on family and other work responsibilities. As a result, though they may be willing to participate in such an exercise they may not have adequate time to do so.

During collaborative learning discussion meetings, most of the respondents said that they discussed and clarified what was learnt during the occasional face to face tutorials that the students had from time to time as seen on table 4.6

The mean score for the responses to this statement is high when measured on a scale of (3.38), indicating that a majority of the respondents participated in group discussion as seen on Table 4.7.

**Table 4.7 Mean scores for participation in group Discussions** 

Mean	3.38
Highest possible score	5

The study found out that collaborative learning played a key role in helping learners understand what was learnt. When given the statement on whatever collaborative learning helped learners understand what was learnt in tutorials, a majority of the respondents (34.6%) strongly agreed with the statement as seen in Table 4.8.

Table 4.8 Collaborative learning helps in the understanding of what was learnt in tutorials

Response	Frequency	Percentage	Mean
Strongly agree	36	34.6	4.04
Agree	40	38.5	
Fairly agree	24	23.1	
Disagree	4	3.8	

Another 38.5% of the respondents agreed with the. statement, showing collaborative learning having a great impact on distance education.

The findings indicate that a majority of the respondents strongly agreed (34.6%) and agreed (38.5%) respectively with the statement. This meant that the mean scores for response to the

statement was 4.4 out of a possible score of 5, indicating that most respondents held the view that collaborative learning helped in understanding what was learnt during tutorials as seen on table 4.9.

Table 4.9 Mean score for effect of collaborative learning on understanding

Mean	4.04
Highest possible score	5.00

Discussion groups that were formed by the distance education students to enhance their learning experience had group leaders. According to the respondents, the group leaders guided the groups in their discussions as seen in Table 4.10.

Table 4.10 the group leader guides the group in the discussion

	Frequency	Percentage	Mean	
Strongly agree	28	26.9	3.65	
Agree	44	42.3		
Fairly agree	8	7.7		
Disagree	16	15.4		
Strongly disagree	8	7.7		
Total	104	100		

(n f)

Some of the respondents, (7.7%) however strongly disagreed with the statement. These may belong to groups that had weak leaders or their leaders had not taken charge of guiding the group processes. The groups had a group leader who led the groups as they discussed. The leader helped the groups to focus their discussions as well as convened the meetings from time to time in response to the statement on the issue, a majority of the respondents, (26.9%) strongly agreed and agreed, (42.3%) with the statement as seen on Table 4.10

In general, there was agreement among the respondents that collaborative learning had enhanced their academic performance as shown on Table 4.10

The high mean score of 3.85 shows the positive effect of group discussion. The findings show that majority agreed and agreed (34.6%) with a statement on the issue. This showed that if well organized and utilized, group discussions could enhance distance learning.

Table 4.11 Collaborative learning has enhanced my academic performance

Response	Frequency	Percentage	Mean
Strongly agree	36	34.6	3.85
Agree	36	34.6	
F aid y agree	20	19.2	
Disagree	4	3:8	
Strongly disagree	8	7.7	
Total	104	100	<u>~</u> }≀

The mean score for the general effect of collaborative learning on academic performance was 3.85 out of possible score of 5.00 as seen on Table 4.12

Table 4.12 Mean score of effect of collaborative learning on academic performance

Mean	3.85
Highest possible score	5.00

This indicates that collaborative learning has a positive effect on academic performance

#### 4.5 Portable Electronic Media Study Style

Universities offering distance education may sometimes use pre-recorded videos or audio cassettes to transmit lectures to learners. Although this practice is common in other universities, the findings of the study indicated that the practice was not commonly utilized in the University of Nairobi for its Bachelor of Education students as seen in Table 4.13

Table 4.13 Responses to statements on the use of portable electronic media study style.

Statement FA		D	SD
	F(%)	F(%)	F(%)
We are given pre-recorded video having 0 lectures in	each	48(46)	52(50)
course		49(46.2)	52(50)
The lectures in the videos help learners 4(3.8) underst	and the	48(46.2)	32(30)
topics		52(50)	48(46.2)
The lectures in the video explain the course 4(3.8)		32(30)	10(1012)
content well		52(50)	48(46.2)
Pre-recorded videos have improved my 4(3.8)		, ,	
academic performance			

Key: SA - Strongly agree, A-Agree, FA-Fairly agree, D-Disagree, SD-Strongly disagree,

The findings show that most respondents strongly disagreed and disagreed with statements concerning the use of portable electronic media as a study style

The findings show that a majority of the respondents strongly disagreed (50%) and disagreed (46%) with the statement respectively this was a major pointer that the university of Nairobi does not use this mode of study. However 3.8 % indicated they fairly agreed with the statement. This group of respondents may be made up of students who have had access to such study material

from other universities.

## 4.6 Internet-Based Study Style

With modern technology, many leading universities of distance learning are adopting internet based mode of content delivery. The study sought to find out the extent to which the University of Nairobi School of continuing and distance education had embraced the same for its students.

The study revealed that the practice had not been well embraced by the University since most of the lessons and study content were delivered either through face to face tutorials and printed study materials and communication through the internet.

In response to the statement of whether the students received course materials from their lecturers through their email addresses, (3.8%) strongly agreed and agreed, (19.2%) with the statement as seen on Table 4.14 The low mean score of 2.45 out of a possible five confirmed that this study style was not popularly utilized.

Table 4.14: My lecturers sent me course material through my email address.

Response	Frequency	Percentage
Strongly agree	4	3.8
Agree	20	19.2
Fairly agree	16	15.4
Disagree	40	38.5
Strongly disagree	24	23.1
Total	104	100

The respondents also enhanced their learning experience through getting course materials and references from the internet. Whereas some of them did so on their own, others were referred to the internet by their course lecturers as seen on Table 4.14.

Table 4.15 My lecturers refer me to course materials on the internet.

Response	Frequency	Percentage
Strongly agree	8	7.7
Agree	36	34.6
Fairly agree	28	26.9
Disagree	20	19.2
Strongly disagree	12	11.5
Total	104	100

These findings showed that this mode of communication and study style had not been exploited. Many lecturers however referred students to course materials and other reference material that 37

was found on the internet in response to a statement on the issue (7.7%) respondents strongly agreed and agreed, (34.6%) with the statement on the issue as seen on Table 4.15.

The students acknowledged that many of them communicated with their lecturers using the email address as shown on *Table 4.15*.

Tables 4.16 I communicate with my lecturers through email on course matters.

Response	Frequency	Percentage
Strongly agree	0	0
Agree	28	26.9
F airl y agree	32	30.8
Disagree	24	23.1
Strongly disagree	20	19.2
Total	104	100

A moderately high number of the respondents agreed, (26.9%) or fairly agreed (30.8%) with the statement. This showed that the students communicated with lecturers using e-mails. This mode of communication could be exploited further by the lecturers utilizing it to send course materials and hence enhance learning.

It can also be used by the students among themselves by sharing course materials and information. The frequency of 28 who agreed and 32 who fairly agreed with the statement meant that the internet based study style played a significant role in improving distance learners' performance as seen on Table 4.16

Table 4.17 Getting materials from the internet has made my study easy and enjoyable

Response	Frequency	Percentage
Strongly agree	20	19.2
Agree	52	50.0
F airl y agree	24	23.1
Disagree	4	3.8
Strongly disagree	4	3.8
Total	104	100

In general, a majority of the respondents held the view that getting materials from the internet had easened their studies.

This study had enhanced the learners' academic performance as was acknowledged by a majority of the respondents as seen on Table 4.17.

Table 4.18 Web-based learning has positively affected my academic performance

Response	Frequency	Percentage
Strongly agree	16	15.4
Agree	44	42.3
Fairly agree	28	26.9

A najectory of the respondents strongly agreed, (15.4%) and agreed (42.3%), with the statement. This meant that if well utilized as a study style, the use of the internet for communication between lecturers and Strongly disagrees among students themselves could enliance learners' performance. Internet based Total discussion groups could be formed by the students towards 100 achieving this goal.

## 4.7 Printed Material Study Style

The study found out that the school of continuing and distance education of the University of Nairobi gives its students printed course materials. These course materials were in the form of printed study modules, handouts, assignments and revision papers as was confirmed 61.6% respondents who fairly agreed or strongly agreed with the statement on the issue as shown on Table 4.19

Table 4.19 we are given printed course Materials

Response	Frequency	Percentage
Strongly agree	12	11.5
Agree	12	11.5
Fairly agree	64	61.60
Disagree	16	15.4
Total	104	100

The respondents held that the printed materials adequately covered the topics in each course. As shown by the responses of the students on the issue on Table 4.20.

Table 4.20: The printed materials adequately cover the topics in each course.

Response	Frequency	Percentage
Strongly agree	9	8.7
Agree	43	41.3
F airl y agree	36	34.6
Disagree	12	11.5
Strongly disagree	4	13.8
Total	104	100

40

The frequency of 43 who agreed and 36 who fairly agreed shows that the respondents were generally satisfied with the way the printed materials were prepared to deliver the course contents as seen in Table 4.20.

Table 4.21 Printed materials are prepared in a way the learner understands course content without difficulty.

Response	Frequency	Percentage
Strongly agree	16	15.4
Agree	60	57.7
Fairly agree	16	15.4
Disagree	8	7.7
Strongly disagree	4	3.8
Total	104	100

This acknowledgement by the respondents shows that although the learners are removed from their lecturers by time and space, the printed course materials present and transmit the required knowledge, skills and attitudes that are intended in the course. The respondents also felt that the printed materials were prepared in a manner that ensured the learner understood the course content without difficulty. According to the study (57.7%) of the respondents agreed and (15.4%) agreed with the statement on the issue.

Table 4.22: Printed materials are delivered to the students early at the beginning of every

#### semester

Response	Frequency	Percentage
Strongly agree	12	11.5
Agree	32	30.8
F airl y agree	24	23.1
Disagree	28	26.9
Strongly disagree	8	7.7
Total	104	100

There was however lack of unanimity among the respondents as to the timeliness of the delivery of the printed materials to the students in response to the statement that sought information on whether the printed materials were delivered to the students early at the beginning of each semester, (7.7%) of the respondents strongly disagreed with the statement on the issue while (26.9%) disagreed with the statement. Another (23.1%) of the respondents fairly agreed with the statement. This signified a possibility that the respondents perception on late delivery of printed material as shown on Table 4.22

Table 4.23: Printed materials contain exercises at the end of each topic to evaluate the learners' understanding.

Response	Frequency	Percentage
Strongly agree	36	34.6
Agree	40	38.5
F airl y agree	16	15.4
Disagree Strongly	8	7.7
disagree	4	3.8
Total	104	100

Education practitioners advocate for evaluation of every lesson to gauge the learners' understanding of whatever has been taught. The study found out that the printed materials contained exercises at the end of each topic which helped in evaluating the learners' understanding of each topic. This was confirmed by a majority of the learners, (34.6%) who strongly agreed with the statement on the issue and (38.5%) who agreed as seen on Table 4.23.

This shows that the quality of learning was enhanced by the revision questions and exercises at the end of each topic. These findings highlight the importance of evaluation in the distance learning mode of education.

Table 4.24: Printed course materials have improved my academic performance. 124

Response	Frequency	Percentage
Strongly agree	8	7.7
Agree	72	69.2
Fairly agree	24	23.1
Total	104	100

There were no respondents who disagreed or strongly disagreed with the statement.

In general, the respondents were unanimous that printed materials improved the learners' academic performance. This was seen in the responses of (7.7%) respondents who strongly agreed and (69.2%) who fairly agreed with the statement on the issue as shown on Table 4.24

#### 4.8 Learners Performance

The study showed that most of the respondents appreciated what distance learning study styles had done to them. A majority of the respondents held that through the various study styles, they had continuously passed their course examinations, acquired new knowledge and skills, improved their social life and changed their attitude towards life.

Table 4.25: I have continuously passed my course examinations

Response	Frequency	Percentage
Strongly agreed	24	23.1
Agreed	48	46.2
Fairly agreed	24	23.1
Disagreed	4	3.8
Strongly disagreed	4	3.8
Total	104	100

On whether the respondents had passed their examination a majority said they had continuously past the examinations indicated on Table 4.25.

Only a small percentage disagreed (3.8 %) or strongly disagreed (3.8 %) with the statement. This small number of respondents represents those who had failed in some examination.

Table 4.26: The education I have got at university through distance learning study styles has positively affected my attitude to life.

Response	Frequency	Percentage	Mean score
Strongly agree	40	38.5	4.27
Agree	52	50.0	
Fairly agree	12	11.5	
Total	104	100	

Most of the respondents agreed 50% and fairly agreed 38.5% with statement on the issue. Further analysis of the mean score of the response showed that most respondents had gained a positive attitude towards life due to distance learning study style as seen on Table 4.27

Table 4.27 mean scores of effect of distant learning study styles on attitude to life

Mea	4.27
n	
Highest possible score	5.00

Table 4.28 The education I have got at university through distance learning has given me

#### new knowledge and skills

Response	Frequency	Percentage
Strongly agree	56	53.8
Agree	40	38.5
Fairly agree	8	7.7
Total	104	100

The education given through distance learning study styles equipped learners with new knowledge and skills. A majority of the respondents agreed 53.8% and strongly agreed with the statement on the issue as seen on Table 4.28.

Table 4.29 the education I have got at university through learning has improved my social

#### life

Response	Frequency	Percentage	Mean score
Strongly agree	48	46.2	4.38
Agree	48	46.2	
F airl y agree	8	7.6	
Total	104	100	

The study found out that distance education had also positively affected the students' social lives. In response to a statement on the issue, a majority of the respondents strongly agreed (46.2%) and agreed (46.2%) with the statement as seen on Table 4.29.

The mean score of the respondent answer to the statement was 4.38 out of a possible score of 5 as seen on Table 4.29

Table 4.30 Mean score of the effect of distant learning on learners' social life.

Mean	4.38
Highest possible score	5.00

The study also found out that distance education had positively affected the students' social lives

Table 4.31 The study styles have improved my study habits

Response	Frequency	Percentage
Strongly agree	52	50
Agree	48	46.2
Fairly agree	4	3.8
Total	104	100

In general a majority of the learners' strongly agreed (50%) and agreed that the various study styles had also improved their study habits as seen on Table 4.31

#### 4.9 Challenges facing Distance learning delivery system

Interview with the Resident Lecturer as well as open ended questions posed to respondents through questionnaires revealed that there are many challenges that faced the distance delivery system. This in turn affected the students study styles.

Some of these challenges included adequate time to be dedicated to studies due to work demands as well as family commitments, insufficient reference materials at the study centers and negative attitude towards graduates of distance learning education when compared to those who attend conventional classes. Others noted lack of support from their employers, financial constraints made it difficult for students to acquire certain gadgets such as computers or be connected to the internet and also lack of widespread electricity infrastructure. Others cited the gender roles they had to play in the society such as being a mother as well as being an impediment to fully concentrating on distance education.

#### 4.10 Summary.

This chapter showed that distance learning study styles had a great influence on learners performance. Specifically, the common study style used namely use of collaborative learning, use of printed material study style, had the greatest influence as could be seen from the mean scores. Internet-based study styles had a lesser influence since it was not commonly used with the use of portable electronic media being non-existent. It also discussed learners 'performance and the challenges facing distance learning delivery systems.

#### **CHAPTER FIVE**

# SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

The chief purpose of the study was to establish the influence of the different study styles on learners' performance among the Bachelor of Education (Arts) students of the school of continuing and distance education of the University of Nairobi. This chapter presents a summary of the information obtained and analyzed. It also presents the conclusions and recommendations made by the study.

#### 5.2. Summary of findings.

The study found out that a majority of the respondents were male, signifying that more males were undertaking further studies through distance education than females. Most of the respondents had certificate level as their highest level of education, They had undertaken PI training hence many were teaching in primary schools. Most of them were working. A majority

of the respondents were also aged between 25 and 34 years,
In order to enhance their academic performance, the distance learning students adopted various study styles. These included use of printed materials, use of discussion groups, use of the internet-based and use of portable electronic media.

The study found out that discussion groups were also used as a collaborative learning study style. A majority of the respondents acknowledged the existence of the groups although it appeared that a majority of the students did not participate actively in them. This was attributed to several factors, such as, work and family commitments. The groups had group leaders who convened meetings and led the members in discussing so as to further understand what was learnt during face to face tutorial sessions. In general, a majority of respondents acknowledged that collaborative learning style through group discussions had enhanced their academic

performance.

The study also established that the use of web-based and other portable electronic media was not commonly used as a study style. Although the study style was common in other Universities as seen in the reviewed literature, the University of Nairobi had not embraced their use.

Another study style that was gaining prominence was the use of web-based resources. The study found out that students communicated with their lecturers through emails although this mode of study was not being used, to send study materials. Instead, some lecturers referred students to resources on the internet to easen their study. The study also found out that the students found the internet to be a good source of study material. It was also viewed as being an enjoyable study style which had positively affected the respondents' academic performance.

The study also found out that the respondents received printed materials from the University in the form of modules, assignments and other handouts. The printed materials adequately covered the topics found in each course.

The materials also had revision questions at the end of the topics to evaluate the learners' understanding of the course content. The study further found out that the materials were delivered to the students at the beginning of every semester and were prepared in a manner that made it easy for the learner to understand the course content without difficulty. **In** general, the respondents were unanimous that printed course materials had improved their academic performance.

The learners appreciated the different study styles that were used in their programmes. A majority of them held that the various study styles had helped them pass the examinations, changed their attitude to life, enabled them acquire new knowledge and skills as well as improve their social life.

#### 5.3 Discussion of findings

The study found out that Portable electronic media style was not used in the University of Nairobi Bachelor of Education (Arts) distance education programme. This is contrary to global practice where universities offering distance education commonly utilized this method. According to the finding by Becker (2004), this mode provides images and geographical features that enhance learning. Another study by Usun (2004) showed that this study style was

convenient for learners since they could learn at their own time and pase. This study style is therefore important in distance education.

The study also found out that the web-based mode of learning was not fully exploited by the university. Studies by Juma (2004) and Stephen (2009) highlighted the importance this study style. It is versatile in that it can allow one in one interaction between the learner and the lecturer either face to face or through writing and sending of emails. A few lecturers had however exploited it through referring students to the internet for course materials, books and journal

articles.

Collaborative learning was found to be a very popular study style among the respondents. The respondents had a leader who oversaw their discussion, arranged for meetings and generally guided the process. These findings concur with eelier studies by Usan (2004) and Juma (2004) on the issue. There is however need to formalize these groups and integrate them in the university study structure since the study found out that belonging to the group was voluntary. As a result some students may end up missing the benefits that are brought by such a study style.

Printed material study style was the most commonly used method. The study findings indicated that the University provided printed learning materials although these were not given out early in the semester. The materials were however valuable in enhancing learning. These finding concur with those of Becker (2004) who highlighted the value of printed material in distance education.

#### **5.4 Conclusion**

Based on the findings of the study, the study concluded that the various study styles namely, use of printed materials, the internet and collaborative learning had a positive influence on distance learners' performance. Specifically in relation to study objectives, the study concluded that collaborative learning, the internet and print media study styles positively influenced distant learners' performance. However, according to the findings, portable electronic media learning

style did not influence the distance learners' performance.

#### 5.5 Recommendation.

Based on the findings of the study, the study recommended that:

- 1. The Universities offering distance education should incorporate the use of portable electronic media to enhance the academic performance of the learners based on their benefits. This arises from the fact that the study found out that University of Nairobi did not utilize this method yet earlier studies showed the benefits brought by use of the method.
- 2. Printed course materials should be prepared and delivered to students early to enhance their performance. This late delivery tended to affect the performance of the learners negatively as was reported by the respondents.
- 3. The universities offering distance education should embrace the use of internet-based technologies. The use of the internet in delivering course materials and communication between students and lecturers should be enhanced,
  - The use of group discussion as a study style should be fostered. It should be made compulsory with a more formal structure than is the case at present where it appeared the participation of learners was irregular. A lecturer should be assigned to each centre to facilitate the formal group discussions and monitor the quality of the discussions.
- 4. This arose from the findings of the study that showed that there was no formal structure that was being used to guide group discussion.
- 5. Face to face tutorials should be accompanied by handouts to enhance the quality of group discussion. Handouts help the learners to remember what was discussed and taught during face to face tutorials. Given that the tutorials take place once in a semester, they will ensure permanency of what was learnt.

#### **5.6 Suggestions for further research**

Since the research covered only one University similar studies can be carried out in other Universities in Kenya offering distance education to uncover the impacts of various study styles. Other studies that will utilize other methods of data analysis can also be carried out to enhance the quality of the findings.

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#### APPENDIX 1: INTRODUCTORY LETTER

University of Nairobi,

School of Continuing and Distance education,

P.O. Box 92,

Kikuyu.

Dear Participant/Respondent,

I am a post graduate student in the above school of the University of Nairobi. I am pursuing a Masters of Education degree in Distance Education. I am undertaking a research study titled, influence of **study styles on distance learners' performance.** Acase of Bachelor of Education Arts Distance Learning' I humbly request you to participate in this study as a respondent. The purpose of the study is to find out the influence of study styles on Distance learners' performance'.

I am therefore requesting you to provide honest and accurate responses to the questionnaires and interview. I promise you that the information you will provide will be handled confidentially. You are free to seek any clarification where necessary during the study.

Thank you in advance for accepting.

Yours faithfully,

RACHEL ANY ANGO MWINAMI

Tel. 0713626648

## APPENDIX 2: QUESTIONAIRRE FOR DISTANCE LEARNING STUDENTS

## Personal Details

Please tick in the appropriate boxes.

1. What is your sex? Male	Female	D	
2. What is your age? Below 25 years <b>D</b>	25- 34 year	rs $\mathbf D$ 3	35-44 years <b>D</b>
45-54 years ${f D}$		55 years	D
3. a) What is your current highest level of	f education?		Secondary education <b>D</b>
certificate <b>D</b>	Diploma <b>D</b>	Other	D
b)If others, please explain			
c) Are you presently working? Yes (	) No ( )		
d) If yes, for how long have you work	ked?		
4. Which year of study are you in?			

#### PART B: DIST ANCE LEARNERS' STUDY STYLES.

The following statements indicate how various Distance Education study styles influence learners' academic performance. Please tick in the boxes to what extend you agree or disagree with the statements.

Key: Strongly Disagree (SD) Disagree (D) Fairly agree(FA) Agree (A) Strongly Agree (SA) a)

## Printed Course Materials

NO	STATEMENTS	SD	D	FA	A	SA
1.	We are given printed course materials (e.g. modules, handouts					
	etc. for each course every semester					
2.	The printed materials adequately covers the topics III each					
	course					
3.	The printed materials are prepared in a way that the learner					
	understands the course content without difficulty					
4.	The printed material is delivered to the students early at the					
	beginning of every semester					

5.	The printed materials contain exercises at the end of each topic						
	to evaluate the learners' understanding of the topic						
6.	Printed	course	materials	have	improved	my	academic
	performa	nce					

# b) Collaborative learning Study Style

NO	STATEMENTS	SD	D	FA	A	SA
1.	We have regular discussions meetings for distance learning					
	students					
2.	I have always participated in group discussions					
3.	Collaborative learning help in the understanding of course					
	content					
4.	Collaborative learning help III clarifying what was learnt					
	during face to face tutorials					
	Our discussion group has a group leader					
	The leader guides the group in the discussion					
	Collaborative learning has enhanced my academic					
	performance					

## c) Portable electronic media Study style

NO	STATEMENTS	SD	D	FA	A	SA
1.	We are given pre recorded video having lectures III each					
	course.					
2.	The lectures in these videos help learners understand the topics					
3.	The lecturers in the videos explain the course content in an					
	easily understood manner					
4.	Pre recorded videos have improved my academic performance					

## d) Internet based study style

NO	STATEMENTS	SD	D	FA	A	SA
1.	My lecturers sent me course materials through my e-mail					
	address					
2.	My lecturers refer me to course materials found on the internet					
3.	I communicate with my lecturers through e-mail on matters					
	concerning the courses we do every semester					
4.	Web based mode of distance education delivery has positively					
	affected my academic performance					
5.	Getting materials from the internet has made my study easy					

# Learners' Performance

NO	STATEMENTS	SD	D	FA	A	SA
1.	I have continuously passed my course examinations since I					
	started my university studies					
2.	The education I have got in the university has positively					
	affected my attitudes to life					
3.	The education I have got at the university through distance					
	learning has given me new knowledge and skills					
4.	The education I have got at the university has improved my					
	social life					
5.	The education I have got from the university has improved my					
	study habits					

Suggest ways in which distance education delivery systems (printed materials, face to face tutorials
etc.) can be improved to enhance learning in your university.
·············
THANK YOU 58

## APPENDIX 3: INTERVIEW SCHEDULE FOR RESIDENT LECTURER

- a. Which modes of distance education delivery do you use in your university?
- b. What benefits do students get from these Distance learners' delivery system?
- c. What challenges do you face in using the different delivery systems?
- d. What suggestions do you propose on how distance education delivery systems can be improved?

# APPENDIX 4 QUESTIONNAIRE FOR DISTANCE LEARNING STUDENTS

## Answer the following questions by ticking yes or no in the boxes provided

## **Collaborative learning**

NO	QUESTIONS	YES	NO
1.	Do you have regular discussion! meetings for distance learners?		
2.	Have you always participated in group discussion?		
3.	Does collaborative learning help you in understanding the course		
	content?		
4.	Does collaborative learning help in clarifying what was learnt during		
	face to tutorials?:		
5.	Does your discussion group have group leaders?		
6.	Does the leader guide the group in discussion?		

## Portable electronic media

NO	QUESTIONS	YES	NO
1.	Are you given pre-recorded video having lectures in each course?		
2.	Do lectures in these videos help learners understand the topics?		
3.	Do the lecturers in the videos explain the course content in an easily		
	understood manner?		
4.	Have pre-recorded videos improved your academic performance?		
5.	Have this style helped you in acquiring skills to cope with the new		
	technology?		

## Internet based style

NO	QUESTIONS	YES	NO
1.	Do your lecturers send you course materials through your e-mail		
	address?		
2.	Have you acquired skills in operating internet?		
3.	Has materials from the internet made your study easy?		
4.	Have you found difficulties in operating internet? /		
5.	Has internet based style positively affected your academic		
	performance?		

# Print media study style



NO	QUESTIONS	YES	NO
1.	Are you given printed materials for each course every semester?		
2.	Do the print materials contain exercises at the end of each topic to		
	evaluate the learners?		
3.	Have printed materials improved your academic performance?		
4.	Do the printed materials delivered to the students early at the beginning		
	of every semester?		
5.	Do the printed materials adequately cover the topics in each course?		
			J