UNIVERSITY OF CAPE COAST

PERCEPTION ON DISTANCE EDUCATION AMONG UNIVERSITY OF CAPE COAST DISTANCE STUDENTS IN ACCRA

FELICIA ADU

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BY

FELICIA ADU

A Dissertation submitted to the Department of Management, School of Business, College of Humanities and Legal Studies, University of Cape Coast, in Partial Fulfilment of the requirements for award of Masters' in Business Administration Degree in General Management

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DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this University or elsewhere.

Candidate Signature……..…….. Date:……..

Name: Felicia Adu.

Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by University of Cape Coast.

Supervisor's Signature……..…….. Date:……..

Name: Dr. Nicodemus Osei Owusu

ABSTRACT

The purpose of the study was to assess the perception of students of distance education about distance learning in Ghana. Specifically, this study assessed; the opinion of distance students regarding distance education in Ghana, the main factors contributing to the demand for distance education, the level of distance students' satisfaction of distance education, and the challenges faced by the students offering distance education. A cross-section survey and quantitative method were adopted. A survey questionnaire was used to conveniently gather data from a sample of distance education students of the University of Cape Coast Campuses in Accra. Overall, 280 distance learners took part in the study. Descriptive statistics such as percentages, mean and standard deviation as well as one-sample z-test inferential statistics were used to analyze the data. The findings revealed that distance education students of distance education had positive attitude towards the program as they perceived distance program to have similar quality comparable to a traditional classroom setting. Factors such as time flexibility, career development, interest in subject matter/subject offered, cost affordability, reputation of the course, and reputation of the University were the main drivers for students' preferences distance education. The students were satisfied with the distance education despite the fact that students were faced with some challenges in the form of overloaded curricular, delay in the release of results, long distance to study centre, and inadequate learner support services. The study recommends to management and facilitators of distance education to address the challenges of the students so as to improve students' satisfaction of the distance learning program.

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DEDICATION

This dissertation is dedicated to my family. As well as to my brother and his wife, Mr and Mrs. Twumasi-Adu and their family, as well as my dad, Dr. Seth Adu, and late mother, Mrs Agnes Adu, for believing in me.

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CHAPTER ONE

INTRODUCTION

Education is one of the most important aspects of our lives, as it can determine our life path moving forward. However, there are circumstances that can sometimes serve as obstacles to those seeking education, thus hindering learning process along the way. One of the main reasons many may falter is due t their location and geographic flexibility. The path to development is aided by many things but common to all such efforts is learning and learning on a massive scale. The challenge of learning is so huge in contemporary times that traditional methods of teaching and learning are not sufficient to address it. Hence, just as technology has helped improve both quantity and quality of products and services, so must technology be applied to learning. This is the only way to address the learning challenge (Daniel & Mallet, 2008).

In the new era of education, the traditional classroom teacher – student study at the Universities and colleges is gradually being complemented or even now being replaced by Distance Education? The purpose of the study is therefore to assess the perception of students of distance education about distance education at the tertiary level in Ghana. Assessing the perception of students about distance education in Ghana is very important because it will provide crucial information to management of tertiary institutions, and providers of distance education to take onboard the opinions of students regarding distance education and the factors that influenced their decision to opt for distance education when formulating distance education policies and programmes.

Background of the Study

The importance of formal education in the development processes is well recognized all over the world. Education is a key contributor to social development and constitutes the bedrock for sustainable economic development. According to Oduro (2010), knowledge and technology are increasingly becoming the basis of competitive advantage in the world. The quality of a country's stock of human capital influences the extent to which knowledge and technology can be utilized to enhance productivity and to improve the well-being of the citizens. These can be achieved through formal education and training. Schaefer (2005) posits that the most basic manifest function of education is the transmission of knowledge. Moreover, education increases the ability to understand, appreciate and critique new ideas, and it can facilitate the adoption and modification of technology to suit a country's peculiar development challenges. One of the problems facing education delivery especially at the university level in developing country like Ghana is lack of access.

Ghana has nine (9) public universities and about sixty-five (65) private Universities, coupled with polytechnics and colleges of education. These institutions have over the years provided for opportunity for individuals both in the private and public sectors of the economy to be trained. However, due to the inadequate number of tertiary institutions in Ghana, these institutions are unable to absorb the large number Senior High graduates coupled with the number of Ghanaian workforce who desire to improve their human capacities.

In the last decade, the opportunities to participate in higher education have been considerably increased beyond the traditional classroom setting to include distance learning (Moller, Robison & Huett, 2012). Distance education can now be considered a viable means of providing higher education for many universities. Advancements in computer technology and public access to the Internet have provided a venue that supports distance learning (Moller, Robison & Huett, 2012). Many mainstream institutions of higher learning have adopted distance learning as the next logical step in educational delivery systems (Cleveland-Innes & Garrison, 2012). In a 2002 survey of 75 randomly chosen college of distance learning programs, results revealed an astounding rate of growth in the higher education distance learning market (Primary Research Group, 2002). In a time of shrinking budgets, distance learning programmes are reporting 41 percent average annual enrollment growth (Primary Research Group, 2002). The demand for distance education is pervasive in Ghana. Most of the public universities, which hitherto had strict admission requirements, are now providing distance education for workers in the evening and during the weekends.

Distance education, is a structured learning in which the student and instructor are separated by place, and sometimes by time is currently the fastest growing form of domestic and international education. Distance education (sometimes referred to as “distributed learning” or “distance learning”), is any educational process in which all or most of the teaching is conducted by someone geographically removed from the learner, with all or most of the communication between teachers and learners being conducted through electronic or print mediums

(UNESCO, 2002). Distance education simply refers to the mode of teaching and learning where the learner and teacher are separated from each other in time and space (Moore, 1973). Distance education has two features namely, distance teaching and distance learning. Distance teaching refers to printed instruction materials developed for use by distance learners while distance learning on the other hand refers to the same process seen from learners' perspective (Keegan, 2013).

One of the important goals of higher education, as commonly recognized and demanded for traditional higher education, is the attainment of higher order, deep and meaningful learning by students. Logically, this goal should be same for students of distance higher education (Garrison, 2010; Garrison & Arbaugh, 2007, Morrison & Anglin, 2012). Distance education has been found to be very useful due to its ability to serve a large number of students at an affordable cost, without constraints of space and time (Mbwesa, 2008).

Scholars in distance learning have also observed that provision of distance education also come with some challenges as cited in Lukwekwe (2015) including students support services (Reuben, 2010), challenges of teaching and learning (Muganda & Kabate, 2012), challenges of mixed mode of distance learning delivery (Muganda, Mwanongwa, & Kapalanaka, 2012), language as a problem in distance education (Msoka & Vuzo, 2012) and challenges that students face after completion (Bitegeko & Swai, 2012). Notwithstanding the above challenges, the demand for distance education in the tertiary level in Ghana is rising. It is therefore

important to find out the factors influencing the demand for tertiary education in Ghana.

Statement of the Problem

Ghana, through the Ministry of Education (MoE) is mandated to provide relevant and quality education at all levels to all Ghanaians for human and national development and to create a dynamic education sector that prepares and equips all Ghanaians with relevant education and skills to promote socio-economic development (Ministry of Education, 2018). The vision is to provide relevant education to all Ghanaians at all levels with relevant education and skills to promote socio-economic development. The mission of the Ministry is to formulate and implement policies that would provide quality, equitable and accessible education to all citizens, with emphasis on Science, Information, Communication and Technology for self-actualization and peaceful coexistence, as well as requisite skills for the labour market and national development. The strategic thrust of the sector during the period under review included increasing access with equity, improving quality of education, and enhancing the management of education service delivery (Ministry of Education, 2018). To achieve its vision of providing relevant education to all Ghanaians at all levels with relevant education and skills to promote socio-economic development, the barriers to access to education especially at the tertiary level should be removed. In an attempt to remove the barriers of access to education, the government of Ghana instituted the Ghana Education Trust Fund (GETFUND) to help expand access to education. However,

the demand for tertiary education is still increasing. One way of eliminating access barriers is the introduction of distance education.

The need for distance education in Ghana today is because the demand for higher education has been so high such that regular learning in the Universities cannot accommodate the huge numbers of students who want to have higher education through the regular program (Higher Education Bulletin, 2016). The demand for distance education may be occasioned by several factors, including population growth, limited number of universities especially public to meet the growing population, affordability of tertiary education, the need for access to knowledge in technology and many more. For example, previous studies have observed that the main factor driving students to take distance learning courses is career development (Chiu, 2010; von Prummer, 2010; MacBrayne, 2015). Constraints of time, distance and finances are also reasons for opting for a distance education (Sherry, 2017). With the rise and proliferation of distance education in Ghana and the multiplicity of factors motivating students to opt of distance education, there is the need to critically examine the perceptions students hold on distance education. Unfortunately, no research work has been done in this areas. It is against this backdrop that the current study aims at examining the perception of distance education in Ghana using public Universities.

Purpose of the Study

The purpose of the study is to examine perception of distance education among University of Cape Coast students offering distance education in Accra. The study assesses the opinion of the students regarding distance education, the factors

contributing to the demand for distance tertiary education, the level of satisfaction among students of distance education, and the challenges of the students face in accessing distance education.

Research Objectives

To achieve the purpose of the study, the following specific objectives have been outlined to:

1. analyse the opinion of distance students regarding distance education in Ghana.
2. identify the main factors contributing to the demand for distance education at the tertiary level in Ghana.
3. examine the level of distance students' satisfaction of distance education in Ghana.
4. examine the challenges faced by the students offering distance education.

Research Questions

1. What is the opinion of distance students regarding distance education in Ghana?
2. What are main factors contributing to the demand for distance education at the tertiary level in Ghana?
3. What is the level of satisfaction of distance education among distance students in Ghana?
4. What are the challenges faced by the students offering distance education?

Significance of the Study

Considering the role of the Ministry of Education and the Ghana Education Service in the provision of relevant education to all Ghanaians at all levels with relevant education and skills to promote socio-economic development, the need for finding out the determinants of demand for distance education at the tertiary level cannot be overemphasized. The finding of this study would help bring out the perception of students of tertiary Universities towards distance education. This information is important because it helps providers of distance education, especially, management of public Universities to take onboard the perception of students regarding distance education when formulating distance education policies and programmes.

The finding of the study would also bring to the fore, the factors influencing students' demand for distance education at the tertiary level. Again, this information will be relevant to management of universities in to consider those factors in their attempt to provide distance education. For example, if affordable cost is the reason for demand for distance education, management of universities in Ghana would consider this cost element in the charges for distance education. Also, if gaining knowledge in technology is important to the students, ICT training would be incorporated in the educational curriculum of distance learners.

Finally, the findings would provide information regarding the effectiveness of distance education in meeting the expectation of distance learners in Ghana. This information would be relevant in moderating the expectation and demand of prospective students of distance of education. The finding would provide

information about the relevance of distance education in Ghana and the need to make distance education much more relevant. Last but not least, the challenges students of distance education face will be found and recommendations made as to how to address the challenges. Finally, the outcome of this study will serve as a reference document for future studies thereby contributing to formulating theories on students' perception of distance education and the factors contributing to the adoption of distance education by students.

Delimitation

The study is delimited to distance learners at the College of Distance Education (CoDE) of the University of Cape Coast, Greater Accra region. The students were selected from Accra only becauses of easy accessed to data. Contextually, the study is limited to the perception of students of CoDE – Accra, regarding distance education in Ghana, the factors contributing to the demand for distance education, and the level of satisfaction of students of distance education and the challenges the students face in accessing distance education. Methodologically, a survey strategy and quantitative methodology were adopted.

Limitation

It is expected that the adoption of the cross-sectional survey strategy presented some challenges to the validity and reliability of the research findings. This is because, the target participants, who are distance learners, were hard to find as most of them were workers who attended lectures only at the weekends. Because of this, data collection was time consuming. Both financial and time constraints, if

not managed properly, could affect the validity and reliability of the research findings.

Definition of Terms

Distance education: Distance education simply refers to the mode of teaching and learning where the learner and teacher are separated from each other in time and space (Moore, 1973).

Demand for distance education: This is the motivation of potential learners to undertake distance education at the tertiary level instead of the regular and structured learning at the tertiary level.

Determinants: This study, a determinant is any factor that have significant positive influence on the demand for distance education at the tertiary level

Organization of the Study

The study was organized into five chapters as outlined as follows. Chapter One is the introduction chapter which encompasses sections such as the background of the study, the problem statement, the purpose of the study, and the objectives of the study. It further states the research questions, the significance of the study, and also looks at the delimitation and limitations, and finally organization of the study. Chapter Two reviews literature on the study area. The chapter reviews relevant theoretical and empirical literatures on the topic. Chapter Three presents the methodology. The chapter will describe the research design, the target population of the study, the sample size, the sampling techniques, the data collection instrument, and the statistical tools used in the data analysis.

Furthermore, chapter Four presents the results and discussions. The chapter presents the data collected from the field and summarize them via tables and graphs. The chapter will also discuss the findings of the study relative to the literature. Chapter Five will represent the conclusion and recommendation. The chapter summarizes the major findings of the study and conclusions attained and also makes relevant recommendations based on the findings. Recommendations for future studies are also included in this chapter.

Chapter Summary

This chapter primarily dealt with the introduction of the research topic as well as the background of the study. It described the statement of the problem and highlighted on the purpose of the study that would guide the researcher in conducting this study. It also presented the research objectives, research questions, significance of the study, as well as the limitations and delimitations of the study. Finally, some of the terms that were used by the researcher were defined, and the organization of the study were outlined.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter provides an overview of previous research on distance education. It introduces the framework for the case study that comprises the main focus of the research described in this dissertation. The main purpose of the literature review work is to survey previous studies on distance education and its determinants. This is in order to scope out the key data collection requirements for the primary research to be conducted, and it formed part of the emergent research design process (Denscombe, 1998, p 217). The approach adopted was in line with current practice in grounded research work. It is now regarded as acceptable for researchers to familiarize themselves with existing research prior to collecting their own data (Easterby-Smith, Thorpe, & Lowe, 2002, pp. 46-47).

An appreciation of previous work in this area provide direction in the construction of data collection tools, it guarded against the risk of overload at the primary data collection stages of the project. Second, working the findings from extant literature into a formal review helps maintain a sense of the topic's perspective.

Theoretical Review

Keegan (1986) identifies three historical approaches to the development of a theory of distance education. Theories of autonomy and independence from the 1960s and 1970s, argued by Wedemeyer (1977) and Moore (1973), reflect the essential component of the independence of the learner. Otto Peters' (1971) work

on a theory of industrialization in the 1960s reflects the attempt to view the field of distance education as an industrialized form of teaching and learning. The third approach integrates theories of interaction and communication formulated by Baath (1982), Stewart (1987), and Daniel & Marquis (1979). Keegan presents these three approaches to the study and development of the academic discipline of distance education. The focus at this time was on the concept of industrialized, open, and nontraditional learning.

In the theoretical development of distance education, number of theories have been identified. The first one is the concept of independent learning from the 1960s and 1970s, represented by Moore (1973) and Wedemeyer (1977). Others are theory of Industrial Production, Theory of Guided Didactic Conversation, Theory of Transactional Distance, Theory of Interaction and Communication, Theory of Reintegration, and Theory of Connectivism

Theory of Independent Learning

They point out that the *independent learning* of a learner is the essential component of distance learning, featured with self-directed learning and self-regulation. Garrison (2000) perceives that the attention to the pedagogical assumptions of independent study is a positive shift from the world of correspondence study dominated by organizational and administrative concerns, to the focusing on educational issues concerning learning at a distance.

Theory of Industrial Production

The second approach is the *industrial production model* of distance education, raised by Otto Peters (1971). His model views distance education as an industrialized form of delivering and organizing the educational process, in order to reach a certain scale of economies. Later, he predicts that it would develop into a post-industrial style, in which students are treated as ―clients and provided with the commercialized services. This organizational model for distance education does not treat teaching and learning issues as of central relevance, therefore, Otto Peters did not advocate this approach for all of distance education. According to his ideal, distance education should be "an independent, self-study, enhanced with social intercourse‖, within a non-formal and individually controlled manner" (Garrison, 2000, p.7).

Theory of Guided Didactic Conversation

The third one is the concept of *guided didactic conversation*, Holmberg's theory of distance education practice. He underlines in that theory the views that distance education should be embedded in "friendly conversation [fostered by] well-developed self-instructional materials [resulting in] feelings of personal relation ... intellectual pleasure [and] study motivation" (Holmberg, 1989, p. 43). The conversation refers to both real and simulated conversations. For achieving simulated conversations, the course developers should produce well-written materials for creating the simulated conversation. On this topic, Garrison argues that "the organizational assumptions and principles of the industrial model and the dependence upon written communication seriously constrain and limit the role of

conversation and the full emergence of a transactional perspective" (Garrison, 2000, p. 8).

Theory of Transactional Distance

The fourth is Michael Moore's (2007) theory of *transactional distance*. It is pedagogical, not geographic, composed of two variables or dimensions: *structure* and *dialogue* (Moore & Kearsley, 2005). Structure reflects the course's design and is largely a function of the teaching organization and communications media employed while the dialogue is also associated with the medium of communication and may include either real two-way communication or Holmberg's internal didactic conversation‖ (Garrison, 2000). The degree of the transactional distance is measured by the relation between the two variables: the transactional distance is inversely proportional to the level of structure and dialogue; that is, the greater the transactional distance the lower the level of structure and dialogue and vice versa. Starting from this, he added on another variable or dimension "learner autonomy". In addition, the extent of a learner's responsibility for his or her own distance learning is in proportion to the degree of the transactional distance.

Theory of Interaction and Communication

The fifth one is the *theories of interaction and communication* formulated by Bååth (1982), Daniel and Marquis (1979). Many other theories based on this approach were developed. One of the important theories of today is the Community of Inquiry Framework. In the complexities of online learning environments, the Community of Inquiry Framework, developed by Garrison (2000, 2007) and others

was used as the broad explanatory base to address the importance of collaboration in achieving higher-order learning outcomes in virtual learning environments.

Other theories are transactional distance and reintegration. Also, connectivism uses technology to intensify learning theories. Distance learning can use these three theories as a foundation to enhance effectiveness.

Theory of Transactional Distance

In their discussion of transactional distance, Moore and Kearsley (2005) state that physical distance resulted in a communication gap, a psychological space of potential misunderstandings between the instructors and the learners that had to be connected by teaching techniques; this was the Transactional Distance. The separation of teacher and learner affected their behavior, and course design, content, interaction, and other teaching processes differ from those used in a face-to-face environment. These teaching behaviors, regarding course design, were able to describe Transactional Distance and labeled dialogue and structure. Discussing dialogue and structure, Moore and Kearsley (2005) also wrote:

- Dialogue and structure are determined by the educational philosophy of the teaching organization, the teachers themselves, the academic level of the learners, the nature of the content, and by the communications media that are employed. Dialogue is the interplay of words and actions and any other interactions between teacher and learner when one gives instruction and the other responds.
- Guided didactic conversation is a key characteristic of good distance learning.

- Structure states the course's educational objectives, teaching strategies, and evaluation methods. All these course components are able to address individual learners' needs

Televised courses had high structure, no dialogue, and high transactional distance. Correspondence courses had more dialogue and less structure and, thus, less transactional distance. Teleconference programs had much dialogue, little predetermined structure, and relatively low transactional distance. Online courses, with little or no dialogue and more structure, asynchronous or synchronous, are of higher transactional distance. Distance learners had to be "entirely independent and make their own decisions about study strategies, decide for themselves how to study, what to study, when, where, in what ways, and to what extent" (Moore & Kearsley, 2005, p. 227).

Transactional distance is related to learning effectiveness. Steinman (2007) argues that large transactional distance with the instructor and with other students affects student satisfaction and retention. Transactional distance is a starting point from which to build a learning philosophy, design effective courses, and pursue learning success.

Theory of Reintegration

Keegan (1996) contends that reintegration of the act of teaching is necessary for successful distance education. "The inter-subjectivity of teacher and learner, in which learning from teaching occurs, has to be artificially re-created. Over space and time, a distance system seeks to reconstruct the moment in which the teaching-learning interaction occurs" (p. 116). According to Morgado, Yonezawa, and

Reinhard (2002), "Most of the Internet-based virtual environments that can be applied to remote education were developed through the integration of synchronous and asynchronous communication tools, such as chat, discussion forums and lists, and electronic mail" (p. 175). Reintegration promotes interaction between teacher and students, among students, and between students and the learning setting to enhance teaching and learning. Through reintegration, a traditional learning environment can be rebuilt in cyberspace.

However, distance-learning environments that are not well integrated cause problems in teaching and learning. Some traditional school activities are not reproduced in a virtual environment, and positive interaction is not maintained during teaching and learning. Reintegration that is not satisfactorily implemented affects retention, learning, and the status of distance learning (Keegan, 1996).

Theory of Connectivism

Siemens (2004) joins learning theories with technology in connectivism and posits that learning is not a process that is entirely under the control of the individual. He states that "Learning is focused on connecting specialized information sets, and the connections that enable us to learn more are more important than our current state of knowing. Thus, the ability to recognize information to meet requirements is vital. Personal knowledge is composed of a network. In the personal-to-network-to organization cycle, individuals and organizations feed knowledge and learning to each other via a network. Siemens (2004) states that "The cycle of knowledge development allows learners to remain current in their field through the connections they have formed." An Internet

connection supports and intensifies existing large effort activities. Connectivism is able to explain this amplification of learning, knowledge and understanding through the extension of a personal network.

As Garrison (2000) has observed, the challenge facing distance education theorists in the 21st century is to provide an understanding of the opportunities and limitations of facilitating teaching and learning at a distance with a variety of methods and technologies. This will demand theories that reflect a collaborative approach to distance education (i.e., as opposed to independent learning) and have at their core an adaptive teaching and learning transaction. "This adaptability in designing the educational transaction based upon sustained communication and collaborative experiences reflects the essence of the post-industrial era of distance education" (p. 13). He adds that asynchronous text-based collaborative learning may well be the defining technology of this era that will challenge theorists to recognize that this form of communication may impact the facilitation of learning outcomes in different ways.

Many distance educators are beginning to call for a theoretical model based on constructivist epistemology (Jegede, 1991). Technological advances have already begun to blur the distinction between traditional and distance education settings. Time and place qualifiers are no longer unique. The need to test assumptions and hypotheses about how and under what conditions individuals learn best, leads to research questions about learning, teaching, course design and the role of technology in the educational process. As traditional education integrates the use of interactive, multimedia technologies to enhance individual learning, the role of

the teacher changes from knowledge source to knowledge facilitator. As networks become available in schools and homes to encourage individuals to become their own knowledge navigators, the structure of education will change and the need for separate theories for distance education will blend into the theoretical foundations for the mainstream of education.

In an effort to theoretically define the field of distance education, Deshler and Hagen (1989) advocate a multidisciplinary and interdisciplinary approach resulting in a diversity of perspectives. They caution that anything short of this approach may "Produce theory that suffers from a view that is narrow, incomplete, discipline-based and restricted to a predominant view of reality" (p. 163). Gibson (1993) calls for a broader conceptualization of distance education using an ecological systems perspective. She argues that "as distance educators we are not only interested in learning, but also in the interaction of those properties of the person and their multiple environments which produce constancy and change in the characteristics of that person over time" (p. 86).

A strategy for theory development from an international perspective has been proposed by Sophason and Prescott (1988). They caution that certain lines of questioning are more appropriate in some countries than in others, thus the emanating theory "may have a particular slant" (p. 17). A comparative analysis strategy would undoubtedly be influenced by cultural bias and language barriers (Pratt, 1989). Pratt further indicates that understanding different culturally related beliefs about the nature of the individual and society may be critical in defining appropriate distance education theories. Pratt clarifies his belief through a

description of how differences in societies' historical traditions and philosophies can contribute to differing orientations toward self-expression and social interactions within educational settings.

It is believed that the theoretical challenges for distance education will center on issues related to learning and pedagogy in technology mediated learning environments. One such issue is understanding and evaluating knowledge construction in online collaborative learning communities. Increasingly we are subscribing to a knowledge construction view of learning as opposed to an information acquisition view, as we design web-based distance learning environments. The knowledge construction perspective views computer networks not as a channel for information distribution, but primarily as a new medium for construction of meaning, providing new ways for students to learn through negotiation and collaboration with a group of peers. The challenge however, is to develop theory to explain how new construction of knowledge occurs through the process of social negotiation in such a knowledge-building community.

A related area of theoretical challenge is to determine how the social dimension of an online learning environment influences learning. The online learning environment has been described as a sociotechnical system incorporating both technical and social aspects. Unique aspects such as the time-independent nature of an asynchronous environment can create communication anxiety, or the lack of visual cues in a text-based medium can give rise to the development of emoticons (icons that express emotion, such as ☺) to express feelings. This environment forces us to reformulate the way in which we view the social

dimension and how learners actively influence each other's knowledge and reasoning processes through social networks.

With the expansion and acceptance of the Internet and the World Wide Web across the globe for education and training, the significance of culture and its impact on communication, and the teaching and learning process at a distance will provide an impetus for further research and theory building. If we design learner-centered learning environments, how do we build on the conceptual and cultural knowledge that learners bring with them? How does culture influence perception, cognition, communication, and the teaching–learning process in an online course? How do we as instructors engage in culturally responsive online teaching? These types of questions need to be addressed in research and in theoretical frameworks as we move toward making distance education a more equitable learning experience.

Concept of Distance Education

Many definitions of distance education exist from various perspectives, purposes, period and contexts. For example, Keegan (1986) defines distance education as "The quasi-permanent separation of a teacher and a learner throughout the length of the learning process; the influence of an educational organization both in the planning and preparation of learning materials and in the provision of student support services; the use of technical media- print, audio or computer to unite teacher and learner and carry the content of the course; the provision of two way communication so that the student may benefit from or even invite dialogue and the quasi- permanent absence of the learning group throughout the length of the

learning process so that people are usually taught as individuals and not in groups with the possibility of occasional meetings, for both didactic and socialization purposes" (Keegan 1986, p. 38).

Another definition pertaining to students of pure online learning or e-learning is that; distance education is a permanent (primarily) separation of the student and teacher in time and geographical location using electronic tools for communication and enrolled in a course offered by a formal institution‖ (Morrison & Anglin, 2012). As indicated earlier, this definition of distance education pertains to students of online learning which does to not apply to distance learning in Ghana since electronic means are used as a medium of instruction and that teachers and students are not separated by in time and geographical location. In Ghana, distance education is still by faced-to-face learning between the teacher and the students.

One relevant definition borrowed and fit for the context of this study is a perspective adopted from Holmberg (1986) distance education includes the various forms of study at all levels which are not under the continuous, immediate supervision of tutors present with their students in lecture rooms or on the same premises, but which, nevertheless, benefit from the planning, guidance and tuition of a tutorial organization. This definition is converged with that of UNESCO (2002) definition that defines distance education as approaches that focus on opening access to education and training provision, freeing learners from constraints of time and place and offering flexible learning opportunities to individual and groups of learners. UNESCO definition is a multidimensional concept aimed at bridging the time, geographical, economic, social, educational and communicative distance

between student and institution, student and academics, student and courseware and student and peers. The definition focuses on removing barriers to access learning provision, student centeredness, supporting students and constructing learning programmes with the expectation that student can succeed. In this study, distance education therefore is the motivation of potential learners to undertake education at the tertiary level instead of the regular and structured learning at the tertiary level where distances learners go through instruction usually after close of work or during the weekends.

Distance Education as a Global Movement

Distance education has developed very differently in the United States from the way it has in the rest of the world. Current international issues regarding the development of distance learning will be discussed at greater length later in this chapter, but it is important to recognize here the importance that many countries have played in the history of distance education and its corollaries, distance and open learning.

The establishment of the British Open University in the United Kingdom in 1969 marked the beginning of the use of technology to supplement print based instruction through well designed courses. Learning materials were delivered on a large scale to students in three programs; undergraduates, postgraduates and associate students. Although course materials were primarily print based, they were supported by a variety of technologies. No formal educational qualifications have been required to be admitted to the British Open University. Courses are closely monitored and have been successfully delivered to over 100,000 students. As a

direct result of its success, the Open University model has been adopted by many countries in both the developed and developing world (Keegan, 1986). Researchers in the United Kingdom continue to be leaders in identifying problems and proposing solutions for practitioners in the field (Harry, Keegan, & Magnus, 1993). The International Centre for Distance Learning, at the British Open University, maintains the most complete holdings of literature in both research and practice of international distance learning. Research studies, evaluation reports, course modules, books, journal articles and ephemeral material concerning distance education around the world are all available through quarterly accessions lists or online.

In Europe and other Western countries, a global concern was beginning to emerge. In a 1992 report, the 12 members of the European Association of Distance Teaching Universities proposed a European Open University to begin that year. This was in direct response to the European Parliament, the Council of Europe, and the European Community (Bates, 1990). In this report, articles from authors in nine European countries describe the use of media and technology in higher education in Europe and reflect upon the need for providing unified educational access in the form of a European Open University to a culturally diverse population.

Since that time, telecommunication networks have grown to circle the globe, linking people from many nations together in novel and exciting ways. As the borders of our global community continue to shrink, we search for new ways to improve communication by providing greater access to information on an international scale. Emerging communication technologies, and

telecommunications in particular, are providing highly cost-effective solutions to the problems of sharing information and promoting global understanding between people. In today's electronic age, it is predicted that the amount of information produced will increase exponentially every year. Since economic and political power is directly related to access to information, many educators like Takeshi Utsumi, President of GLOSAS (Global Systems Analysis and Simulation) have worked to develop models of the "Global University" and the "Global Lecture Hall" which provide resources allowing less affluent countries to keep up with advances in global research and education (Utsumi, Rossman, & Rosen, 1990). International issues will be discussed in more detail later in this chapter, so let us turn our attention now to the issue of theory in distance education.

Elements of Distance Education

According to Draves (as cited by Holcomb, et al., 2004). The elements of distance education include:

i. Opportunity for the student to learn during his/her own individual "best" time.
ii. Pace for learning is set by the student.
iii. Learning occurs faster.
iv. Personal interaction with both the teacher and other students can occur with greater frequency.
v. Classroom participants may experience greater diversity by interacting with students that could be residents of anywhere in the world.

vi. Distance learning has been found to be less expensive and more accessible

Desmond Keegan (1980) identified six key elements of distance education:

i. Separation of teacher and learner
ii. Influence of an educational organization
iii. Use of media to link teacher and learner
iv. Two-way exchange of communication
v. Learners as individuals rather than grouped
vi. Education as an industrialized form

Aims and Learning Outcomes of Distance Education in Higher Education

Larreamendy-Joerns and Leinhardt (2006) identify two visions of distance learning in higher education: the first is that distance education is opportunistic learning; the second is that distance education is a substitute for on-campus learning. Opportunistic learning would therefore mean that learning is sought to address specific needs in the context of professional activities. According to the first vision, distance education is an alternative for individuals for whom on-campus learning may be unavailable or, more important, undesirable. For example, working professionals may require information carefully tailored to their occupation and professional interests. By supplying learning opportunities without disrupting the flow of everyday activities, online distance education benefits from the situatedness of learning and help to bridge the gap between work and school (Larreamendy-Joerns & Leinhardt, 2006)).

In the other vision of the role of distance education in higher education, the authors argue that distance education is a substitute for on-campus learning. Distance education is seen as an important approach to disseminate general education through distance along the ideals of the liberal arts tradition. The emphasis from this version is twofold: first, on humanistic and scientific knowledge; and second, on critical inquiry and questioning. According to this vision, distance education is crucial in mitigating the traditional elitism of liberal arts education. Yet, its significance stems from the access it provides, not from the fit between knowledge and the context of learning. In that sense, distance education expands on what is already available and valued in on-site education‖ (Larreamendy-Joerns and Leinhardt, 2006, p.577).

Although it is arguable which vision distance education should follow, there is no doubt that it is within the sphere of higher education. If so, then distance education should share the same aims as conventional higher education, and distance students should be expected to obtain the same qualities as other undergraduates. Derek Bok (2008) explains that the aims of undergraduate education should have the following eight perspectives: the ability to communicate; critical thinking; moral reasoning; preparing citizens; living with diversity; living in a more global society; a breadth of interests; preparing for a career. Moreover, Marples (1999) also asserts that one of the essential aims or educational ideals for higher education is to enable students' analytical thinking, and to foster their critical skills.

Evolution of Distance Education Media

As stated in Keegan's (1980), and more recent definitions of distance education, media plays a critical role in linking the teacher and learner and providing for the two-way exchange of communication that is so necessary for the teaching and learning process. Until the advent of telecommunications technologies, distance educators were hard pressed to provide for two-way real time interaction, or time-delayed interaction between students and the instructor or among peers. In the correspondence model of distance education, which emphasized learner independence, the main instructional medium was print and it was usually delivered using the postal service. Interaction between the student and the instructor usually took the form of correspondence of self-assessment exercises that the student completed and sent to the instructor for feedback. Formal group work or collaborative learning was very rare in distance education even though attempts have been made to facilitate group activities at local study centers. Also, traditionally, distance education courses were designed with a heavy emphasis on learner independence and were usually self-contained. With the development of synchronous (two-way, real time interactive technologies) such as audio teleconferencing, audiographics conferencing and videoconferencing it became possible to link learners and instructors who are geographically separated for real time interaction.

These technologies facilitated interaction between an instructor and a group of learners, or among learners. They are not very suitable for promoting collaborative learning among a group of learners over an extended period of time.

Also, the synchronous nature of these technologies may not be suitable or convenient for many distance learners as it requires instantaneous responses when questions are asked, and often learners had to travel to a site to participate in an audio or video teleconference.

The asynchronous (time-delayed) feature of computer-mediated communications (CMC), on the other hand, offers an advantage in that the CMC class is open 24 hours a day, 7 days a week to accommodate the time schedules of distance learners. Although CMC systems may be either synchronous (real-time), or asynchronous (time-delayed), it is asynchronous CMC, because of its time independent feature that is an important medium for facilitating collaborative group work among distance learners.

Current developments in digital communications and the convergence of telecommunications technologies exemplified by international standards such as ISDN (Integrated Services Digital Network), make available audio, video, graphic and data communication through an ordinary telephone line on a desktop workstation. Therefore, as we look at distance learning technologies today and look to the future, it is important to think in terms of integrated telecommunication systems rather than simply video versus audio, versus data systems. More and more institutions that teach at a distance are moving toward multimedia systems integrating a combination of technologies both synchronous and asynchronous that meets learner needs. Therefore, while in the 1970s and 1980s many distance education institutions throughout the world used print as a major delivery medium, by the year 2002 many institutions in the United States have adopted

telecommunications-based systems for the delivery of distance education. This does not necessarily mean that print will no longer be used in distance education. It is still a very important medium as books, reading packets, study guides and even computer files are downloaded and used in printed format. However, in the future it is more likely that print will be used as a supplementary medium in most telecommunications-based systems, and better ways of communicating information through print will be investigated and incorporated into the design of study guides and other print-based media.

Factors Influencing Demand of Distance Education

Different writers have identified factors that contribute to enrolment in distance Education Hormberg (1990) and Keegan (1994) have identified factors of high enrolment as convenience, flexibility and adaptability of this mode as it suits the learners. Those who cannot for one reason or another make use of classroom teaching and above all adults with profession (or jobs) and family commitments.

A variety of factors motivate adult students to take distance learning courses. In general, the main factor driving students to take distance learning courses is career development (Chiu, 1990; von Prummer, 1990; MacBrayne, 1995). Constraints of time, distance and finances are also reasons for opting for a distance education (Sherry, 1997). Jarmon et al. (1998) in Teaching at a Distance identified access and time flexibility, the opportunity to collaborate with students who live far apart, and the opportunity to collaborate with students of diverse backgrounds for greater learning as the primary reasons for students to take distance

learning courses. The socializing and convenience factors were confirmed in several other studies (Rasmussen, 1993; Ridley et al., 1997).

In an informal study, Christensen, et al. (2001) found that students choose to enroll in distance education courses for one or more reasons. By participating in courses at a distance, expenses can be reduced or limited. Travel expenses to campus or dormitory rental and meal plans can be avoided. Fees for recreational centers or sport activities are often not assessed when strictly enrolled in distance courses. Students with family or work responsibilities command flexibility in order to meet lifestyle requirements. Also occurring in the decision-making process is campus security and safety concerns.

Other motivators identified include the instructor and the supplemental material available (Rasmussen, 1993). MacBrayne (1995) found that rural students were also encouraged by the location of the institution offering the course and their interest in the course content. Students at Christopher Newport University in Virginia reported a preference for online media and the development of online skills in addition to reduced travel expenses and reduced travel time as their most frequent reasons for taking online courses (Rasmussen, 1993; Ridley et al., 1997).

Effectiveness of Distance Education

In terms of academic performance, students in distance education settings have been judged to perform as well or better on assignments, class activities, and exams when compared to campus-based students (St. Pierre, 1998). Regarding the quality of distance education, quality has improved since the days when distance learning programs were known for being easy courses with no team interaction

(Lankford, 2001). Smith (2001) spoke to the rigor of some courses in which distance students are judged by their ability to communicate electronically and must demonstrate understanding of the course material on assignments other than closed-book tests.

Benson, Johnson, Taylor, Treat, Shinkareva, and Duncan (2004) found that students perform equally well in distance learning and on-campus courses. Their study examined the differences between online and campus-based delivery models in terms of student achievement, including assessment of content-knowledge gain and the quality of student assignments and projects, in postsecondary career and technical education. They found "no difference in the student achievement measures of the online and on-campus students" (p. 54). This result supports other research on the effectiveness of virtual and face-to-face environments: Distance learning is as effective as traditional learning.

Mode of Delivery in Distance Education

Effective interaction is required for a successful distance-learning environment. Interaction includes learner-content, learner-instructor, learner-learner (Moore, 1989) and learner-interface (Hillman, Willis, & Gunawardena, 1994). Consideration of each type of interaction is important for effective distance learning.

Learner-Content Interaction

Learner-content interaction is one of the important methods for enhancing distance learning. Baath (1982) stated that in the "models with stricter control of learning towards fixed goals," distance learning focuses more "on the teaching

material than on the two-way communication between student and tutor/institution" (p. 15). Positive learner-content interaction can improve learning satisfaction and contribute to student success. It is related to instructional interface and structure and to students' ability to construct their learning as course participants in a self-directed learning environment.

Moore (1989) believes that the interaction between the learner and the content or subject of study is a defining characteristic of positive learning experiences. It is "the process of intellectually interacting with content that results in changes in the learner's understanding, the learner's perspective, or the cognitive structures of the learner's mind". Holmberg (1986) contends that this involves internal "guided didactic conversation," which happens when learners talk to themselves about the information and ideas they encounter in a text, television program, lecture, or elsewhere (p. 4). According to Moore and Kearsley (2005), "procedures in instructional design and the facilitations of interaction" affect course structure to cross the transactional-distance barrier (p. 223). The authors define structure as "the rigidity and flexibility of the course's educational objectives, teaching strategies, and evaluation methods" (p. 226-227).

Technology plays a vital role in designs for learner-content interaction. The instructional conversation between learners and materials reconstructs knowledge, which is accomplished through interaction with content in text-, video-, audio-, and web-based environments (Mitzel, 1971; Moore, 1989). Northrup, Lee, and Burgess (2002) found that interacting with "audio-narrated online presentations and innovative instructional strategies [including] case studies, structured games, and

online discussion" (p. 4), is important to the learner's online experience. Learner-content interaction provides a foundation for conversation, collaboration, and informal discussion. Marks, Sibley, and

Arbaugh (2005) defined student-content interaction as "pedagogical tools and assignments, including PowerPoint presentations, streaming audio and video presentations, group projects, individual projects, and embedded links in Web courses" (p. 538). Students were able to collaborate to construct their knowledge with others and collaborate with others to construct their understanding of the subject. Thus, students benefit from the integration of interactive elements into the design and assessment of courses. Effective use of learner-content interactive components was able to promote interaction and satisfaction of distance education students (Chang & Smith, 2008; Westbrook, 1997) and finally contributed to their success.

Learner-Instructor Interaction

Learner-instructor interaction, an active process of constructing knowledge that was supported by dialogue, was important to learning (Laurillard, 2002; McKenzie, 2002). This interaction increased "student satisfaction with the overall learning experience" in a self-directed environment (Woods, 2002, p. 385). Moore (1989) believed that interaction between "the learner and the expert who prepared the subject material, or some other expert acting as instructor" was regarded as essential and highly desirable by learners (para. 7). This type of interaction was a primary teaching strategy (Laurillard, 2002). The technology for discussion activities has proliferated as a means to support effective course objectives in

distance learning. In Moore's 1989 study, students, under the instructor's direction, were shown how to interact with content in the manner that was most effective for that individual, and the instructor had a separate dialogue with each student to motivate and/or resolve misunderstandings. This teaching and learning process led to "a style of guided didactic conversation likely to influence students' attitudes and achievements favorably" (Holmberg, 1986, p. 55).

Research has shown that positive learner-instructor interaction is a vital element of an effective distance-learning experience (Askvig & Arrayan, 2002; Liao, 2006; O'Leary & Quinlan, 2007; Rowland, Hetherington, & Raasch, 2002) and increases learner satisfaction (Chang & Smith, 2008; Yukselturk & Yildirim, 2008). Moore (1989) contends that "the frequency and intensity of the teacher's influence on learners when there is learner-teacher interaction is much greater than when there is only learner-content interaction" (para. 8) and adds, "The instructor is especially valuable in responding to the learners' application of new knowledge" (para. 10). Student satisfaction and success are also enhanced by receiving timely feedback from their instructor (Kirby, 1999; Yukselturk & Yildirim, 2008). In contrast, feedback that was delayed or limited causes problems in learner-instructor interaction (Kirby, 1999). Additionally, instructor feedback that is individualized is highly effective. Feedback that is timely and personalized motivates students' learning and autonomy and allows the instructor to evaluate student achievement and diagnose difficulties (Moore, 1989).

Various online-discussion tools have been extensively employed in both asynchronous and synchronous courses to facilitate interaction (Bloch, 2002;

Harris, 1998; Yukselturk & Yildirim, 2008). Discussion boards and chat rooms allow distance educators to implement collaborative course activities. Dialogue between instructors and learners sustains these collaborative efforts; with teachers' immediate responses, self-directed learners are motivated and able to interact with the course content (Lee & Gibson, 2003; Moore, 1989). Learner-instructor interaction is essential for successful construction of knowledge in a planned virtual environment (Hung & Crooks, 2009).

Learner-Learner Interaction

Learner-learner interaction or inter-learner interaction is communication "between one learner and other learners, alone or in group settings, with or without the real-time presence of an instructor" (Moore, 1989, p.11). Both learner-learner and learner instructor interaction are key elements that affect student satisfaction within a distance learning experience (Chang & Smith, 2008; Driver, 2002; Frey & Alman, 2003; Hassenplug & Harnish, 1998; Moore, 1989). Discussion between students is essential to peer interaction and learning (Laurillard, 2002).

Since this type of interaction is important for learning, it has to be analyzed to improve effectiveness (Moore, 1989; Yukselturk & Yildirim, 2008). Communication technologies are used to promote learner-learner interaction and increase student performance (Moore, 1989; Murphy & Ciszewska-Carr, 2007). Online discussion is a vital teaching strategy to maintain small group learner-learner interaction (Driver, 2002; English, 2007; Marks et al., 2005; Pollock, Hamann, & Wilson, 2005) and satisfaction with the interactive learning environment (Jiang & Ting, 1999; Jin, 2005). Asynchronous threaded discussions

and e-mail and synchronous chat rooms allow students to interact with individual students, a small group, or the entire class. Furthermore, discussion activities provide the best opportunities for collaborative distance learning in the virtual environment (Chou, 2001; Daradoumis & Marques, 2002). Learners post their responses and inspire further discussion; in this way, they are able to collaboratively manage learning, develop expertise, and construct knowledge (Lee & Gibson, 2003; Moore, 1989; Son, 2002).

McDonough (2004) showed that students with more experience working in pairs and small groups achieve higher levels of learning, while students with a limited background in computer-mediated communication participate less and are more dependent on learner-instructor interaction, or "learner training and program restructuring" (Paran, Furneaux, & Sumner, 2004, p. 350). This affects what Moore (1989) refers to as "learner autonomy," or the ability of the learner to construct knowledge and achieve planned learning objectives (para. 14). Moore goes on to state that the student's circumstances, age, and experience affect learner-learner interaction. As a result, in addition to the study of learner characteristics, interactive settings for online courses need to be designed for maximum effectiveness. Learner-learner interaction is important for student success in a "self-directed environment" (Lee & Gibson, 2003, p.185-186).

Learner-Interface Interaction

Hillman, Willis, and Gunawardena (1994) define learner-interface interaction as the "process of manipulating tools to accomplish a task" (p. 34). Successful learner interface interaction requires the learner to understand both the

procedures of working with the interface and the reasons why these procedures obtain results. Learner-interface interaction mediates learner-content, learner-instructor, and learner-learner interactions in distance learning. Effective learner-interface interaction is able to improve the distance learning student's overall learning experience (Liao, 2006; Sinha, Khreisat, & Sharma, 2009) and satisfaction (Bray, Aoki, & Dlugosh, 2008; Chang & Smith, 2008; Shee & Wang, 2008). Hence, communication technology fundamentally affects educational transaction in a self-directed learning environment (Garrison, 1990a). Inability to interact successfully with technology inhibits students' active involvement in the educational transaction (Garrison, 1990a). This causes learners to dedicate more mental resources to retrieving information and to leave fewer resources for lesson content (Hillman et al., 1994). Furthermore, Repman and Logan (1996) note that "a mismatch between technology and instruction and the unnecessary emphasis placed on the technology by the instructor" become barriers to learning (p. 37). If instructors are unfamiliar with educational technologies, that discomfort can affect their students. For example, a distance learner studying a nontechnical subject such as psychology effectually is taking two courses, content and interface. As a result, to succeed in the course the student has to develop an understanding of the specific communication protocol associated with the delivery system (Hillman et al., 1994).

Distance educators must orient students to distance education technologies to ensure learner-interface interaction for effective learning (Davie & Wells, 1991; Hillman et al., 1994). Training and experience are the foundational solutions to overcome mismatch and discomfort between instructors and technology

(Brinkerhoff & Glazewski,2000; Recesso, 2001; Repman & Logan, 1996). Identifying students' computer performance levels before enrollment, providing technical support, and creating departmental gateway websites for information resources were found to facilitate learner success (Brinkerhoff & Glazewski, 2000; Shelton, 2000, p. 7). Learner-interface interaction is able to "increase student engagement and retention" (Sinha, Khreisat, & Sharma, 2009, p. 4) and reshape learning communities for collaboration (Gilbert, 1996, as cited in Repman & Logan, 1996; Repman & Logan, 1996; Leh, Kouba, & Davis, 2005; Verdejo, Barros, & Abad, 1998). Learners are more likely to have a positive educational experience if the technologies that mediate the other three types of interactions are carefully considered.

Students Satisfaction of Distance Learning Program

In learning perspective, student satisfaction is defined as "the perception of enjoyment and accomplishment in the learning environment" (Sweeney & Ingram, 2001, p. 57). Wu et al. (2010) viewed student satisfaction as "the sum of student's behavioral beliefs and attitudes that result from aggregating all the benefits that a student receives" (p. 157). Therefore, in fully distance learning environments, student satisfaction is defined as "an emotional response that can be induced by actual product, service, or process quality or some combination of product and service quality" (O'Leary & Quinlan, 2007, p. 135), and as "a concept that reflects outcomes and reciprocity that occur between students and an instructor" (Thurmond et al., 2002, p. 176). According to Sinclaire (2011), out of 34 studies reviewed, only six (Sweeney & Ingram, 2001; Wu et al., 2010; O'Leary & Quinlan,

2007; Thurmond et al., 2002) clearly defined student satisfaction in distance learning environments, which means that a study needs to be conducted to support the literature in this area. Students' satisfaction in a hybrid learning environment was derived from Bandura's Social-cognitive theory (as cited in Wu et al., 2010), and online environments derived from Astin's Input-Environment-Outcome model (as cited in Thurmond et al., 2002).

Learners are more likely to be satisfied with their overall educational experiences when the following areas are sensitively examined and planned for: interaction, learner characteristics, technology, instruction, and learning engagement (Harvey, Plimmer, Moon, & Geall, 1997). Each of these items are discussed in the following sections.

Learning Satisfaction and Interaction

According to Katz (2000), "A distance learning system that is highly interactive and most closely resembles a regular college lecture hall is best suited to contribute significantly to student satisfaction and achievement" (p. 29). In contrast, a less interactive delivery system was unable to engender student satisfaction or achievement in distance learning. Thus, effective interaction is crucial to learner satisfaction in both in distance-learning and traditional settings (Vamosi, 2004). Katz (2002) contends that "Seemingly the feeling of satisfaction with learning, the feeling of control of learning and study motivation are in some way related to the students' need for teacher-student interaction that most closely resembles the traditional classroom" (p. 7). Learner-learner and learner-instructor interaction are positively correlated with learner satisfaction (Baker,1999; Bray,

Aoki, & Dlugosh, 2008; Fulford & Zhang, 1993; Garrison, 1990b; Ritchie & Newby, 1989). Studies have also explored the impact of the four types of interaction and identified them as important to learning satisfaction (Bray, Aoki, & Dlugosh, 2008).

Learning Satisfaction and Learner Characteristics

Learner characteristics often contribute to satisfaction with distance learning. Bower, Kamata, and Smith (2001) reported that of the remote-site teleclass students they studied, those who were "concrete thinkers, emotionally stable, conscientious, and self-assured" were more likely to be satisfied (p. 8). Studies of satisfaction and learner demographics have considered the following variables: learners' independence (Katz, 2002), age (Richardson & Long, 2003), student autonomy (Bray, Aoki, & Dlugosh, 2008), and online learning experiences (Rodriguez, Ooms, Montanez, & Yan, 2005). Bray et al. (2005) found that, "learning satisfaction was higher for students who: (1) could persevere in the face of distance learning challenges, (2) found computers easy to use, (3) found it easy to interact with instructors, and (4) did not prefer social interaction with others when learning. These characteristics of distance learners can be used as indicators of student satisfaction.

Learning Satisfaction and Technology

Technology is generally believed to play an essential role in learner satisfaction (Finlay, Desmet, & Evans, 2004; Guzley, Avanzino, & Bor, 2001), though other analyses have yielded no evidence for this (O'Leary & Quinlan, 2007). Research has shown that learners are more satisfied in distance-learning

environments than traditional settings (Kuo, 2005) and have positive course experiences (Motiwalla & Tello, 2000) because distance-learning programs are more flexible in terms of time and geography (Kuo, 2005; Reinhard, Yonezawa, & Morgado, 2000), since online courses can be accessed anytime and anywhere.

Learning Satisfaction and Instruction

In their discussion of the relationship among instructional design, instructor behaviors, and learner satisfaction, Wilson, Cordry, and King (2004) state, by creating a comfortable learning community, student satisfaction with distance course availability could continue to grow at an explosive and successful rate, creating new opportunities for more students to participate in desired academic development.

Course design is also important for satisfaction in online environments (Shea, Pickett, & Pelz, 2003; Stein, Wanstreet, Calvin, Overtoom, & Wheaton, 2005). Stein et al. (2005) contend that instructors must include interaction in the course structure and note that although student-initiated interactions are important, they do not contribute as much to overall satisfaction. Moreover, Bozkaya and Erdem Aydin (2007) posit that student satisfaction with an instructor is associated with the teacher's verbal and nonverbal immediacy behaviors "through video conference and face-to-face academic tutoring services"; the latter behaviors include "having eye contact with learners, acting in a natural way, and using facial expressions while presenting the content. These behaviors increase learners' satisfaction with the teacher. Hence, interactive design profoundly affects learner satisfaction in distance learning.

Learning Satisfaction and Learning Engagement

Research has also focused on the correlations among academic engagement, perceived academic quality, critical thinking, and learner satisfaction. Richardson and Long (2003) believe that student satisfaction is directly related to "some aspects of academic engagement," "some aspects of perceived academic quality," and "the close link between academic engagement and perceived academic quality" (p. 240). They define academic engagement as "communication, institutional affiliation, learning from materials, relations with tutors, and tutorial pace" and state that the attributes of quality academics include "appropriate assessment, generic skills, good materials, and student choice" (p. 240). Additionally, Schumm, Webb, Turek, Jones, and Ballard (2006) found that "satisfaction with critical thinking appeared to be the most important predictor variable," along with instruction, overall training, and usefulness or relevance of training (p. 47). Therefore, satisfaction is also related to academic engagement, perceived academic quality, and critical thinking.

Empirical Review

Students satisfaction of distance education

Cobb (2011) explored students' social presence in online nursing courses and its relationship to student satisfaction and perceived learning at a United States college using the same instrument. Students (n = 128) responded to the online survey with a 43 percent response rate. The course instruction mainly used an asynchronous and text-based Learning Management System (LMS) – Blackboard's discussion forum. Findings indicated that social presence was highly positively

correlated with perceived learning and satisfaction, similar to the findings of Hostetter and Busch (2006). However, there was no significant relationship between social presence with regard to gender, the number of previous online courses, or currently taken. A multivariate regression analysis showed that social presence predicted a higher amount of variation in overall satisfaction than in perceived learning. Unfortunately, there was no effect size reported. Extending a study among hybrid students, demographic characteristics differences—such as: ethnicity, gender, technology, level of students, prior online course experience with various courses—was recommended (Cobb, 2011; Spears, 2012).

Estelami (2012) surveyed student satisfaction and learning outcomes in purely online and hybrid-online course formats among those who enrolled in marketing and financial courses (n = 177) across ten course sections studied over a two-year period with the same instructor. Student satisfaction was found to be affected by cognitive presence, teaching presence, the use of effective learning tools, and the instructor for both formats as determined by Cobb (2011) and Spears (2012). Factors such as instructor quality, clarity of assignments and tasks, quality of the instructional material used, and course communications were the primary contributors to positive student experiences for both courses. Learning experience was unaffected by hybrid delivery, whereas the financial services course showed a positive relationship between learning perceptions and hybrid delivery of the course. Student satisfaction and overall learning experience were primarily driven by the contents and characteristics of the course and the quality of instruction. There was nothing clearly mentioned about response rate and effect size in this study. Due

to the fact that the sample was derived from part-time students, the result is not applicable to full-time students and other types of courses.

Harrison, Gemmell, and Reed (2014) surveyed fully-online students' levels of satisfaction (n = 45) of the dissertation course in 2001 at the University of Manchester, England. A total of 37 responded to the study (82% response rate) from part-time and full-time students. Researchers discovered that the number of contacts initiated with their supervisor, and the time spent working on their dissertation course, were not significantly associated between satisfaction among either part-time or full-time students. Opposite results were found among fully-online students who enrolled in public health courses. Largely, 85 percent (28 students) were satisfied or very satisfied with the dissertation course, overall. The constant comparative analysis conducted by these researchers identified key themes and feedback included peer support. They advocated exploring gender, age, and previous online experiences on satisfaction for future study. This study, however, admitted that they were unable to identify an existing validated satisfaction survey. Many uncertainties endure about the study, especially on instrument, number of sample size, and effect size.

Ashong and Commander (2012) surveyed the impact of ethnicity and gender on satisfaction of fully-online education among African-American and White-American students at a research institution in the southeastern United States. They centered study of satisfaction on: computer usage, teacher support, student interaction and collaboration, personal relevance, authentic learning, student autonomy, equity, enjoyment, and asynchronicity. One hundred twenty students

participated in the study, but the actual number of participants and response rate were unidentifiable in this study. Results indicated that females were more satisfied than males about learning online. African-American and White students had overall positive views of online learning. However, the comparisons of those groups were not representative. Most of the participants in this study were enrolled full time; status of study is believed to have connection on satisfaction (Shea and Bidjerano, 2008). Most of the participants had previous online course experience (taken at least one online course), which might have influenced the result. The researchers suggested extending this study with demographic variables, as also suggested by Denson et al. (2010). Additionally, this study focused on satisfaction in general; the researchers did not intend to concentrate on courses, which clearly needs further study on this particular issue, as agreed by several researchers (Arbaugh, 2000; Artino, 2008; Gunawardena & Zittle, 1997; Keeler, 2006; Lee et al., 2011).

Kranzow (2013) highlighted literature about crucial concerns in successfully offering online courses and proposed to faculty (college or school) members several practical aspects that should be emphasized exclusively regarding curriculum and pedagogy. Kranzow concluded that teaching presence can be improved by considering five pedagogical aspects that are essential for online instructors as well as cognitive presence by structuring courses to meet students' needs and satisfaction that are emphasized by most recent researchers (Grady, 2013; Seaton & Schwier, 2014). This is offered in Table 4 as some broad considerations for instructors.

Grady (2013) focused on action research to find out causes for a decrease in course satisfaction by students (n = 338) enrolled in a mid-south university school of education in the United States with a compressed-timeline online course compared to satisfaction in previous courses. A total of 54 percent responded (n = 183) in the study. The researcher noticed that teaching presence and the number of assignments indicated that satisfaction was influenced by these changes. Garcia et al., (2014) extended their previous survey with a focus group to examine methods to improve instructional delivery for graduate students (n = 48) in an educational leadership course in a master of Education program in a university located in South Texas, United States, however effect size was not stated. They distinguished among students choosing a hybrid learning mode based on social presence, cognitive presence, flexibility, responsibility in learning, and active learning. In particular, they noted student's need for flexibility; accessing materials online, facilitates a learning experience. This study indicated that course content was a significant factor that affected student learning as established by other studies (Garrison et al., 2010a; Garrison et al., 2010b).

Wahab (2007) examined students' expectation and satisfaction with the academic experiences provided by Open University Malaysia (OUM). The researcher found from the result of factor analysis that online course organization was the most important factor, and learning outcome was the most satisfying to students. The researcher recommended that further study on satisfaction level needed to be conducted in regard to the characteristics of the students, such as age, employment situation, objectives, and others factors. Another study at the same

university, conducted by Latif et al. (2007), explored students' priority for service and their perceived satisfaction with the service (n = 2,946) with a response of 12.5 percent using a self-designed instrument. The sample was derived from 28 learning centers in the September semester of 2005. They determined that the six major areas considered in priority-satisfaction by students were: student records management, registration and orientation, learner centeredness, student affairs, assessment and teaching, and learning. However, the validity and reliability of the self-designed instrument were not reported. The level of satisfaction found in this study was general and not focused on a specific issue. Researchers recommended further study to explore particular issues in-depth: course information, My VLE, tutors/instructors (staff), and communication.

Alman et al. (2012) compared students' perceived satisfaction in cohort and non-cohort programs among students who enrolled in IT courses in the summer semester of 2011. The modified version of the CoI survey was conducted among face-to-face and online students. A total of 36 students with a response rate of 67% participated in the study. They found that the cohort-based learning community had a positive influence on the key factors of all presences, and the cohort students exhibited higher perceived satisfaction than the non-cohort students. The data provided evidence to suggest those student subjects in the formally-organized online learning cohort program were more satisfied than their peers in the traditional on-campus program. As acknowledge by the researchers, due to the very low sample size, there is a need to extend this study to include a greater sample size

and a more diverse population with characteristic differences: i.e., age, background, and courses enrolled.

Conceptual Framework

The study seeks to examine the perception of students of distance education regarding distance education in Ghana so as to establish the factors influencing demand of distance education at the tertiary level of Ghana. Based on information from the literature, the factors shall be grouped into personal characteristics, physical facilities, economic factors and social-cultural factors that relate to demand form distance education. The factors are envisioned to provoke discussions among educational policymakers, and providers of tertiary education in Ghana. The factors constitute the independent variables while demand for distance education becomes the dependent variable. The relationship between the independent variables and dependent variables is presented in Figure 1.

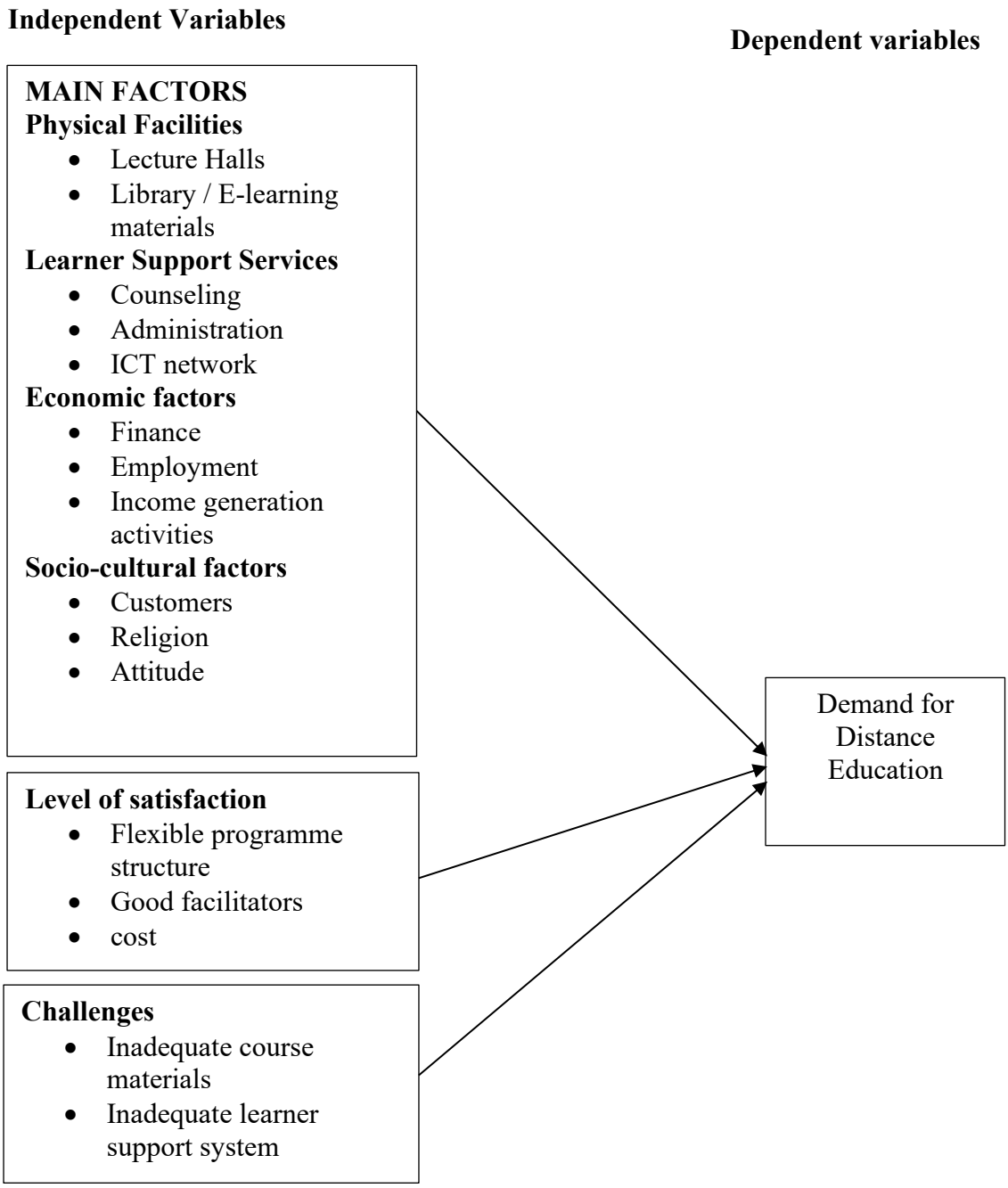

Figure 1: Conceptual Framework

Source: Author's own construct

Chapter Summary

This chapter provided an overview of the theoretical empirical and conceptual framework of the study. The theoretical review provides the various theories adopted to explain distance education. The empirical literature provides information about related findings of the study. The conceptual framework provides the model adopted to examine the factors influencing the demand of distance education at the university level.

CHAPTER THREE

RESEARCH METHOD

Introduction

This chapter primarily provides information about the research method adopted to achieve the purpose of the study. The chapter describes the research design, the target population sample and sampling procedure, the instrument used for data collection and the statistical tools used to analyze the data. The chapter ends by presenting ethical considerations and the chapter summary.

Research Design

A research design expresses the mutual efforts of the major parts of the research project in the solution of research question. The study adopted a cross-sectional survey strategy and quantitative methodology to achieve its purpose. The study adopts survey strategy because the survey "provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population" (Creswell, 2009, p. 145). Creswell (2008) also indicates that in conducting a research, the researcher needs to think about the philosophical worldviews, the strategy of enquiry related to the worldviews and the methods and procedures of the research. A quantitative methodology was adopted because this methodology, which founded on the philosophical paradigm of positivism, provides information which is objective and devoid of the influence of the researcher (Quinn, 2010).

The current study is also descriptive. descriptive research is a scientific method that focuses on observing and describing the behaviour of a subject without

influencing it in any way (Creswell, 2009).The study is descriptive because it focuses on describing the perception of students of public tertiary distance education regarding distance education in Ghana, the factors influencing demand for distance education, the level satisfaction of students about the distance education program and the challenge faced by distance education student.

This survey design allows for the gathering of opinions, beliefs, or perceptions about a current issue from a large group of people (Lodico, Spaulding & Voegtle, 2006). The main thrust of survey design is to collect appropriate data which work as a base for getting results and drawing conclusion. The research design is therefore suitable for the study because data was collected through questionnaire, to answer the research questions concerning the perception of students regarding distance education in Ghana.

Population

The study targeted distance learners in public universities in the Greater Accra region. Only students who take their courses on weekends were to be contacted. The specific target students were sampled from the University of Cape Coast Distance Education in Accra (UCC), specifically, the final semester Masters students in the School of business, who are about 399 in number.

Sample Size

The determination of the appropriate number of the target respondents was based on Yamane (1967) formula:

$$n = \frac{N}{1 + Ne^2}$$

Where, "*n*" represents the estimate sample size to be calculated, while "*N*" is the size of the relevant population. The value of "*e*" (margin of error) largely depends on the required level of confidence in the finding of the study. At 95 percent, level of confidence, the "e" value would be 0.05. In this study 95% confidence level was be adopted. Knowing the total number distance learners in the selected institutions, the sample size, n, was determined. This study N=400, therefore,

$$n = \frac{N}{1+Ne^2} = \frac{400}{1+400(0.05)^2} = \frac{400}{2} = 200$$

In this study 300 questionnaires were sent to the field and 280 were obtained. This represents a response rate of 93.33%. The response ration was therefore 93.33%, while the non-response ratio was 6.77%.

Sampling and Sampling Procedure

Non-probability sampling techniques were used. The sampling of the University is by purposive sampling. This is because only 1 public University was of interest to the researcher. The university also constitute a major public university in Accra. Convenience sampling techniques was used to select the distance learners in the selected institution. Convenience sampling technique was used because only the target distance learners in the selected university who were present at the time of the data collection and willing to provide information for the study were sampled.

Data Collection Instrument

For the purpose of this study, data collection was done by using a structured questionnaire as a primary data collection instrument. The questionnaire was structured in four sections: The first section (Section A) of the questionnaire

examined the profile of the respondents. The demographic profile of the respondents included items such as: gender, age, level of education, employment status, and income level.

Section B assessed the opinion of students of public tertiary distance education regarding distance education in Ghana. Items of the instrument will measure on a Five-point Likert Scale: 1= "Strongly Disagree"; 2= "Disagree"; 3=" Neutral"; 4= "Agree" and 5 =" Strongly Agree. Items included; the structure of the distance education program, learner support services, the learning environment, and the learning processes.

The next section (Section C) examined the factors distance learners consider important in their choice of distance education at the tertiary level in Ghana. Again, items of the instrument will measure on a Five-point Likert Scale: 1= "Strongly Disagree"; 2= "Disagree"; 3=" Neutral"; 4= "Agree" and 5 =" Strongly Agree. Items included; time flexibility, not having to be physically in class, working with teachers not in your school, working with students not in your school, reputation of the course, reputation of the teacher, reputation of the school, interest in subject matter, affordable cost, curiosity in the distance learning experience, technology used etc.

The next section (Section D) determined the level of level satisfaction of distance education distance education students. Items on the questionnaire were responded to on a Five-point Likert scale ranging from (1) very dissatisfied (5) very satisfied (5). Items include; Diverse selection of courses, Flexibility in course

selection, program relating contents to practice, courses schedule, Updated knowledge in courses, etc.

Section E assessed the challenges distance education students face. Items of the instrument were measure on a Five-point Likert Scale: 1= "Strongly Disagree"; 2= "Disagree"; 3=" Neutral"; 4= "Agree" and 5 =" Strongly Agree. Items included; the structure of the distance education program, learner support services, the learning environment, and the learning processes.

Pre-Testing

The questionnaires were pretested to ensure clarity and information validity prior to them being administered (Strauss & Corbin, 2007). The objective of the pilot study was mainly to pre-test the questionnaire on a representative sample and to use the feedback from the pilot study to refine the questionnaire for the main research. The questionnaire was pretested on 10 respondents drawn from the College of Distance Education, University of Cape Coast. In choosing the students for pretesting, the researcher used convenience sampling which means that any student available at that particular time was asked to answer the questionnaire.

Data Collection Procedure

An introductory letter from the School of Business, UCC was obtained to prove the authenticity of this research work. The copy of the introductory letter was given to the Registrar of the target University to seek their audience in order to conduct the research in their institution. Also copies of the introductory letter was given to all the participants alongside participants' consent form and the invitation letter asking for permission to invite participants who fall within the domain of the

study area to participate in the study. The essence was to enable the participants to familiarize themselves with the issues for discussion. The purpose of the study was explained to the participants and they were also being encouraged to participate and respond to the questions. Nsowah-Nuamah (2005) remarked that the goal of explaining the purpose of the study to the respondents is to obtain meaningful responses that would help in the decision-making process. After explaining the rational for the study to them, a convenient date and time was set for the administration of the instrument to the respondents. The questionnaires were then distributed to the target distance students by personal contact. The students allowed ample time for them to respond to questionnaire. The questionnaires were retrieved through personal contact for sorting and analysis.

Data Validity and Reliability

Validity in research simply means the extent to which instruments (questionnaires or structured interview schedules) measure what they intend to measure. In other words, validity means to what extent that the selected tool measures the intended research objectives (Bowling, 2009). In the context of this study, several strategies were undertaken to validate and refine the content of the questionnaire. To address the face validity, the experts painstakingly read the questionnaires and the appropriate corrections made before it is given out. Peer review was also of immense importance. Content validity was further enhanced by asking experienced experts in the field to go through the questionnaire before it was administered to the respondents.

Data Processing and Analysis

Data analysis was done using descriptive statistics. Descriptive statistics such as percentages, means, and standard deviations were used to present findings. Mean and standard deviation were used to present the main finding regarding the perception of students of public tertiary distance education regarding distance education in Ghana, the factors distance learners consider important in their choice of distance education, the satisfaction of distance education learners, and the challenges faced by distance education students. The mean values represent the average respondent of all respondents regarding a particular item in the questionnaire using the ranking scale while the standard deviation represents the spread of the respondents about the mean along the scale. Data analyses was done using the Statistical Product and Service Solutions (SPSS, Version, 20).

Ethical Considerations

Bless and Higson Smith (2000), state the main rules of data collection as: a) voluntary participation b) the right to privacy c) Freedom and d) Anonymity e) Confidentiality. All these ethical rules will be met in this research study. The study ensured that informed consent of the participants in the study is obtained. Participant's privacy, confidentiality and anonymity will be guaranteed through the researchers' permission letter, consent form and covering letter provided. As indicated by Punch (2000), all social research involve consent, access and associated ethical issues, since it is based on data from people about people. There are five human rights that require protection in research: "the right to self-determination, the right to privacy, the right to anonymity and confidentiality, the

right to fair treatment, and the right to protection from discomfort and harm" (Burns & Grove, 2009, p. 189). The appropriate action would be taken to protect the human rights of the participants in this study.

As participants who voluntarily agree to participate will be used in this study, the participants will be asked to read and sign a consent form that addressed human rights protection. The study ensured the research subjects' right to self-determination by informing the subjects about the proposed study and allowing them to choose to participate in the study or not. A research is expected to be free from any biases and it must be scientifically sound and reported honestly, thoroughly and completely (Malhotra& Birks, 2007).

Participants were informed about the purpose of the research and what objective it seeks to achieve. They were encouraged to feel free and express their views as objectively as possible and they will have the liberty to choose whether to participate or not. They also had the option to withdraw their consent at any time and without any form of adverse consequences.

Anonymity and confidentially were guaranteed and the researcher did not cause harm or mental stress to those who choose to participate. This research and its associated methodology adhered to all of these ethical considerations. An organizational entry protocol was observed before the data was collected. Individual students and staff of the University of Cape Coast were informed of the reason for the whole exercise and the benefits the University would derive if the research is carried out successfully.

Chapter Summary

This chapter primarily dealt with the research method and design. It described the procedures adopted in conducting this study. It presented the research design, study organization, population, sample and sampling procedure, the instrument that were used for data collection and how the data was analyzed and presented as well as the ethical considerations.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter provides the findings and discussion of the study resulting from the data collected. The chapter first section presents the socio- demographic profile of the respondents. The next section presents the findings and discussions in respect of the opinion of student education students regarding distance education, the factors the distance learners considered important in their choice of distance education, the level of satisfaction of distance education students, and the challenges are facing.

Socio-demographic Profile of Respondents

This section presents the demographic profile of the respondents who were distance education students of UCC sampled from various campuses in Accra. The profile of the respondents included; gender, age, employment status, and average monthly income. Overall 280 students participated in the study.

Gender Distribution of Respondents

With regard to the gender distribution of the respondents, majority, 52.1% (n=146) were males while the remaining, 47.9 % (n=134) represented females. This distribution means that the information regarding perception of distance education students about distance education in Ghana was obtained both male and female distance education students of UCC in Accra. The above distribution is presented in Table 1.

Table 1: Gender Distribution of Respondents

Category	Number	Percent (%)
Male	146	52.1
Female	134	47.9
Total	280	100.0

Source: Field Survey Data, 2019

Age Distribution of Respondents

Regarding the age distribution of the participants as presented in Table 2, 43.6% (n=122) were within 20-29 years of age. Also, while 51.4% (n=144) representing the majority were within the age group of 30-39 years, 5.0 % (n=14) of the respondents were 40-49 years of age. Overall, all the respondents were 20 years and above but less than 50years of age.

Table 2: Age Distribution of Respondents

Category	Number	Percent (%)
20-29 years	122	43.6
30-39 years	144	51.4
40-49 years	14	5.0
Total	280	100.0

Source: Field Survey Data, 2019

Employment Status

Table 3 presents the employment status of the distance education students who participated in the study.

Table 3: Employment Status

Category	Frequency	Percent (%)
Public	115	41.1
Private	64	22.9
Self-employed	32	11.4
Unemployed	69	24.6
Total	280	100.0

Source: Field Survey Data, 2019

The finding shows that 41.1% (n=115) of the students were employed in the public sector and 22.9 % (n=64) were employed in the private sector. Also, while 11.4% (n=32) were self-employed, the remaining 24.6% (n=26) were unemployed. Employment status may have implication on the income level of the youth and their ability to afford decent housing.

Average Monthly Income

Average monthly income has implication for the ability of the students afford distance education. Table 4 also present the income distribution of the sampled distance education students. The finding reveals that majority of the students 52.1% (n=146) had average monthly income below GH¢1000. Also, while 34.6% (n=97) had average monthly income of GH¢1000-1999, 9.6% (n=26) had an average monthly income of GH¢2000-2,999 and the remaining 3.9% (n=11) average monthly income of GH¢3000 and above.

Table 4: Average monthly income

Category	Frequency	Percent (%)
Less than GH¢1000	146	52.1
GH¢1000-1999	97	34.6
GH¢2000-2999	26	9.4
GH¢3000 and above	11	3.9
Total	280	100.0

Source: Field Survey Data, 2019

Opinion of Students about Distance Education

The first specific objective of the study is to assess the opinion of distance students regarding distance education in Ghana. The opinions of the youth were sought using a five-point Likert scale. Descriptive statistics such as mean and standard deviations were used to analyse the data. If the mean value for an item is significantly greater than 3.0 (population mean), then the respondents agreed with that aspect of distance education in Ghana. To determine which item has mean value significantly greater that 3.0 (population mean), one-sample z-test was performed at 95% confidence level assuming the hypothesis (Ho: $\mu \leq 3.0$; H1:$\mu > 3.0$). The findings are presented in Table 5.

Table 5: Students Opinion Regarding Distance Education in Ghana

	N	Mean	Stdev	z-stat	p-value
Distance education has helped to bridge the gap between work and school	280	4.21	0.82	24.69	0.000*
The quality of distance learning comparable to a traditional classroom setting	280	4.12	0.86	21.79	0.000*
The learning environment is appropriate for effective academic work	280	4.11	0.87	21.35	0.000*
Students have good relationship with their instructors	280	4.11	0.88	21.11	0.000*
The structure of the program is flexible	280	4.08	1.04	17.38	0.000*
I prefer distance learning to traditional classroom setting	280	4.07	1.02	17.55	0.000*
The course contents are adequate to ensure effective training of students	280	4.03	0.91	18.94	0.000*
The instructors of the program are very impactful	280	3.18	1.09	2.76	0.003*
There are adequate number of courses for the distance learning program	280	3.06	1.04	0.97	0.167
Distance education in Ghana is well structured to meet the demand of students	280	2.82	0.99	-3.04	0.999
A good number of course materials exist for the program	280	2.72	0.82	-5.32	1.000
There are learner support services with distance education	280	2.55	0.91	-8.27	1.000

Source: Field Survey Data, 2019

***Statistically significant at 5% alpha level (0.05)**

Scale: 1= "Strongly disagree"; 2= "Disagree"; 3 = "Neutral"; 4= "Agree"; 5= "Strongly agree".

The outcome of one-sampled z-test presented in Table5 gives indication that respondents agreed with some assertions regarding distance education in Ghana ($p<0.05$). That is the participants agreed with the assertions that distance education has helped to bridge the gap between work and school ($M=4.21$, $SD=0.82$, $z=24.69$, $p=0.000$), the quality of distance learning comparable to a traditional classroom setting ($M=4.12$, $SD=0.86$, $z=21.79$, $p=0.000$), the learning environment is appropriate for effective academic work ($M=4.11$, $SD=0.87$, $z=21.35$, $p=0.000$),

students have good relationship with their instructors (M=4.11, SD=0.88, z=21.11, p=0.000), the structure of the program is flexible (M=4.08, SD=1.04, z=17.38, p=0.000). The student further agreed that they prefer distance learning to traditional classroom setting (M=4.07, SD=1.02, z=17.55, p=0.000), the course contents are adequate to ensure effective training of students (M=4.03, SD=0.91, z=18.94, p=0.000), and that the instructors of the program are very impactful (M=3.18, SD=1.09, z=2.76, p=0.003).

The students of distance education, however, did not agree (p>0.05) with the assertions that there are adequate number of courses for the distance learning program (M=3.06, SD=1.04, z=0.97, p=0.167), distance education in Ghana is well structured to meet the demand of students (M=2.82, SD=0.99, z=-3.04, p=0.999), a good number of course materials exist for the program (M=2.72, SD=0.82, z=-5.32, p=1.000). Also, the students failed to agree that there are learner support services with distance education (M=2.55, SD=0.91, z=-8.27, p=1.000).

Factors the Students Considered Important in Their Choice of Distance Education

The second objective of the study is to find out the main factors contributing to the demand for distance education at the tertiary level in Ghana. This objective was achieved asking the students to indicate the factors they consider important in their choice of distance education using five-point scale. Again, descriptive statistics such as mean and standard deviations were used to analyse the data. Therefore, if the mean value for an item is significantly greater than 3.0 (population mean), then the item was considered important by the students in their choice of

distance education otherwise the factor was not important. One-sample z-test at 95% confidence level was again performed and the results presented in Table 6.

Table 6: Factors Considered by Students in their Choice of Distance Education

Factors	N	Mean	Stdev	z-stat	p-value
Time flexibility	280	4.12	0.88	21.30	0.000*
Career development	280	4.01	0.82	20.61	0.000*
Interest in subject matter/subject offered	280	3.98	0.98	16.73	0.000*
Cost affordability	280	3.50	0.87	9.62	0.000*
Reputation of the course	280	3.48	1.02	7.87	0.000*
Reputation of school	280	3.46	1.03	7.47	0.000*
Working with students from other schools	280	3.08	0.94	1.42	0.077
Greater use of technology	280	3.04	0.89	0.75	0.226
Curiosity in how distance learning works	280	3.03	0.79	0.64	0.263
Working with teachers from other schools	280	2.98	0.87	-0.38	0.650
Reputation of the instructor	280	2.86	1.05	-2.23	0.987

Source: Field Survey Data, 2019
***Statistically significant at 5% alpha level (0.05)**
Scale: 1= "Not important"; 2= "Less important"; 3 = "Neutral"; 4= "important"; 5= "Very important".

The finding revealed that distance students considered a number of factors in their choice of distance education. The factors included time flexibility (M=4.12, SD=0.88, z=21.30, p=0.000), career development (M=4.01, SD=0.82, z=20.61, p=0.000), interest in subject matter/subject offered (M=3.98, SD=0.98, z=16.73, p=0.000), cost affordability (M=3.50, SD=0.87, z=9.62, p=0.000), reputation of the course (M=3.48, SD=1.02, z=7.87, p=0.000), and reputation of the University (M=3.46, SD=1.03, z=7.47, p=0.000).

However, the students did not consider the following factors as important before opting for distance education ($p>0.05$). the factors included working with students from other schools ($M=3.08$, $SD=0.94$, $z=1.42$, $p=0.077$), greater use of technology ($M=3.04$, $SD=0.89$, $z=0.75$, $p=0.226$), curiosity in how distance learning works ($M=3.03$, $SD=0.79$, $z=0.64$, $p=0.263$), working with teachers from other schools ($M=2.98$, $SD=0.87$, $z=-0.38$, $p=0.650$), and reputation of the instructor ($M=2.86$, $SD=1.05$, $z=-2.23$, $p=0.987$).

Distance Students' Satisfaction of Distance Education

The third objective of the study is to examine the level of distance students' satisfaction of distance education in Ghana. This objective was achieved asking the students to indicate the factors they consider important in their choice of distance education using five-point scale. Again, descriptive statistics such as mean and standard deviations were used to analyse the data. Therefore, if the mean value for an item is significantly greater than 3.0 (population mean), then the item was considered important by the students in their choice of distance education otherwise the factor was not important. One-sample z-test at 95% confidence level was again performed and the results presented in Table 7.

Table 7: Level of Students' Satisfaction of Distance Education

Factors	N	Mean	Stdev	z-stat	p-value
The course content of distance education	280	3.92	0.96	16.04	0.000*
The structure of distance education	280	3.96	0.92	17.46	0.000*
The facilitator-student relationship	280	3.92	0.94	16.38	0.000*
The quality of the academic and administrative staff	280	3.80	0.86	15.57	0.000*
The nature of the training received	280	3.72	0.93	12.95	0.000*
Conduct of examination	280	3.47	0.98	8.03	0.000*
The cost of distance education	280	3.38	0.74	8.59	0.000*
Overall satisfaction of distance education	280	3.24	0.88	4.56	0.000*
The environment of my study center	280	3.05	0.97	0.86	0.194
The grading system of distance education	280	3.02	0.98	0.34	0.366

Source: Field Survey Data, 2019

***Statistically significant at 5% alpha level (0.05)**

Scale: 1= "Very dissatisfied"; 2= "Dissatisfied"; 3 = "Neutral"; 4= "satisfied"; 5= "Very Satisfied"

The finding revealed that distance students were satisfied with some aspect of the distance education they have entered into. The aspect of distance educations the students were satisfied with included the course content of distance education (M=3.92, SD=0.96, z=16.04, p=0.000), the structure of distance education (M=3.96, SD=0.92, z=17.46, p=0.000), the facilitator-student relationship (M=3.92, SD=0.94, z=16.38, p=0.000), the quality of the academic and administrative staff (M=3.80, SD=0.86, z=15.57, p=0.000), the nature of the training received (M=3.72, SD=0.93, z=12.95, p=0.000), conduct of examination (M=3.47, SD=0.98, z=8.03, p=0.000), the cost of distance education (M=3.38, SD=0.74, z=8.59, p=0.000), and overall nature of distance education (M=3.24, SD=0.88, z=4.56, p=0.000).

However, the students could not indicate whether or not they were satisfied with the aspect of distance education including the environment of my study center (M=3.05, SD=0.97, z=0.86, p=0.194), and the grading system of distance education (M=3.02, SD=0.98, z=0.34, p=0.366).

Challenges Faced by Students of Distance Education

The fourth objective of the study is to examine the challenges faced by the students offering distance education. This objective was achieved asking sampled respondents constituting the students to indicate to their challenges they are facing with respect to the distance education program using a Five-Point Likert scale. Again, descriptive statistics like mean and standard deviation were used to present the findings. Items with mean values significantly greater than 3.0 (population mean) constitutes the major challenges faced by the students in the distance education program. Here again, a one-sample z-test at 5% significance level was conducted and the finding presented in Table 8.

Table 8: Challenges Faced by Students of Distance Education

	N	Mean	Stdev	z-stat	p-value
There is overloaded curricular	280	4.22	0.98	20.83	0.000*
Delay in the release of results	280	4.15	0.96	20.04	0.000*
Long distance to study centre	280	3.94	0.92	17.10	0.000*
There are inadequate learner support services with distance education	280	3.67	0.99	11.32	0.000*
Students have poor relationship with their facilitators and coordinators	280	3.04	0.97	0.69	0.245
The facilitators/tutors don not attend lectures regularly and are not very impactful	280	2.92	1.15	-1.16	0.878
The learning environment is not appropriate for effective academic work	280	2.71	1.12	-4.33	1.000
Module, course materials and ID cards are not distributed promptly	280	2.58	0.96	-7.32	1.000
The structure of the program is not flexible	280	2.43	0.96	-9.94	1.000
The quality of distance learning is poor	280	2.38	0.97	-10.70	1.000
The cost for distance education is high	280	2.27	1.02	-11.98	1.000
Communication between students and management/Administrators is ineffective	280	2.18	1.04	-13.19	1.000
The course contents/modules are inadequate to ensure effective training of students	280	2.16	1.02	-13.78	1.000

Source: Field Survey Data, 2019
***Statistically significant at 5% alpha level (0.05)**
Scale: 1= "Strongly disagree"; 2= "Disagree"; 3 = "Neutral"; 4= "Agree"; 5= "Strongly agree".

The output of the descriptive analysis revealed that the students are facing some challenges in the distance education program ($p<0.05$). The main challenges faced by the students included; overloaded curricular ($M=4.22$, $SD=0.98$, $z=20.83$, $p=0.000$), delay in the release of results ($M=4.15$, $SD=0.96$, $z=20.04$, $p=0.000$), long distance to study centre ($M=3.94$, $SD=0.92$, $z=17.10$, $p=0.00$), and inadequate learner support services ($M=3.67$, $SD=0.99$, $z=1.32$, $p=0.000$)

Chapter Summary

This chapter provided the findings and discussion of the study resulting from the data collected. The chapters' first section presented the socio-demographic profile of the respondents. The next section presented the findings and discussions in respect of the opinion of student education students regarding distance education, the factors the distance learners considered important in their choice of distance education. The chapter also shed light on the level of satisfaction of distance education students, and the challenges are facing.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

Introduction

The chapter presents the summary of the study by stating the objectives, the methodology adopted and the key findings obtained. The chapter also presents the conclusion arrived at and proffer appropriate recommendations for government and future researchers.

Summary

The purpose of the study was to assess the perception of students of distance education about distance learning in Ghana. More specifically, this study assessed the opinion of distance students regarding distance education in Ghana, the main factors contributing to the demand for distance education at the tertiary level in Ghana, the level of distance students' satisfaction of distance education, and examined the challenges faced by the students offering distance education. A cross-section survey and quantitative method were adopted. A survey questionnaire was used to conveniently gather data distance education students from the University of Cape Coast Campuses in Accra. Overall, 280 distance learners took part in the study. Descriptive statistics such as percentages, mean and standard deviation as well as like one-sample z-test inferential statistics were used to analyze the data.

With regard to the opinion of the students in respect of the distance education in Ghana, the study found that the students were of the opinion that distance education has helped to bridge the gap between work and school, the quality of distance learning comparable to a traditional classroom setting, the

learning environment is appropriate for effective academic work, students have good relationship with their instructors, the structure of the program is flexible, they prefer distance learning to traditional classroom setting, the course contents are adequate to ensure effective training of students, and that the instructors of the program are very impactful

With respect to the factors considered important by the students in choosing distance education, the study found that the factors included time flexibility, career development, interest in subject matter/subject offered, cost affordability, reputation of the course, and reputation of the University.

Pertaining to the satisfaction of students about the distance education, study found that the students were satisfied with some aspect of the distance education program including course content of distance education, the structure of distance education, the facilitator-student relationship, the quality of the academic and administrative staff, the nature of the training received, the conduct of examination, the cost of distance education, and overall nature of distance education.

On the issue of the challenges faced by students of distance education, the study found that the main challenges included overloaded curricular, delay in the release of results, long distance to study centre, and inadequate learner support services.

Conclusions

From the finding of the study, it can be concluded that largely students of distance education in UCC have positive attitude towards the program as they perceive the program to have similar quality comparable to a traditional classroom

setting. This is because distance education is perceived to have good learning environment, good learner-tutor relationship, flexibility, adequate course contents and very impactful instructors. Therefore, factors such as time flexibility, career development, interest in subject matter/subject offered, cost affordability, reputation of the course, and reputation of the University are the main drivers for students' preferences for distance education. Students are satisfied with the distance education despite the fact that students are faced with some challenges in the form of overloaded curricular, delay in the release of results, long distance to study centre, and inadequate learner support services.

Recommendations

This study makes the following recommendations centered on the major finding of the study

1. The study found that distance learning student faced challenges in the form of overloaded curricular. The study therefore recommends to management and administrators of the distance education centre of UCC to structure the program in such a way that students will have enough time to study and understand the course content. As much as practicable, some of the course can be taught during the week to create space for students to able digest what they have learnt.
2. Delay in the release of results was found to be a problem to the distance education students. The facilitators of the program are advised to release results timeously to avoid the uncertainties that usually engulf students when results are delay.

3. Long distance to study centre was found to be a challenge to students undertaking distance education. As much as possible many more learning centres should be created across Accra to shorten the distance and time taken by students to go for lectures.
4. Inadequate learner support services were found to one of the challenges faced by distance learning students. The recommend to facilitators of the distance learning program to provide adequate learning support systems to students to enhance their learning. For example, teaching assistants could be employed provide tutorials to students. This will help students to clarify issues that were not understood during the regular teaching period. Also, more reference course materials should be provided to students.

Future Research

The study recommends for future studies to consider expanding the scope of the study to include many more students from other universities through a nation-wide survey to make the finding much more worthy of generalization.

Chapter Summary

The final chapter presented the summary of the study by stating the objectives, the methodology adopted and the key findings obtained. The chapter also presented the conclusion arrived at and proffer appropriate recommendations for government and future researchers.

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APPENDICES

APPENDIX 1: KREJCIE & MORGAN (1970) TABLE

N = Population size S = Recommended sample size					
N	S	N	S	N	S
10	10	220	140	1 200	291
15	14	230	144	1 300	297
20	19	240	148	1 400	302
25	24	250	152	1 500	306
30	28	260	155	1 600	310
35	32	270	159	1 700	313
40	36	280	162	1 800	317
45	40	290	165	1 900	320
50	44	300	169	2 000	322
55	48	320	175	2 200	327
60	52	340	181	2 400	331
65	56	360	186	2 600	335
70	59	380	191	2 800	338
75	63	400	196	3 000	341
80	66	420	201	3 500	346
85	70	440	205	4 000	351
90	73	460	210	4 500	354
95	76	480	214	5 000	357
100	80	500	217	6 000	361
110	86	550	226	7 000	364
120	92	600	234	8 000	367
130	97	650	242	9 000	368
140	103	700	248	10 000	370
150	108	750	254	15 000	375
160	113	800	260	20 000	377
170	118	850	265	30 000	379
180	123	900	269	40 000	380
190	127	950	274	50 000	381
200	132	1 000	278	75 000	382
210	136	1 100	285	1 000 000	384

Exhibit 1: Sample size for any given population

Source : Krejcie & Morgan (1970 : 608)

APPENDIX 2: SURVEY QUESTIONNAIRE

UNIVERSITY OF CAPE COAST

COLLEGE OF DISTANCE EDUCATION

TOPIC: Perception of Distance Education among University of Cape Coast Distance Students in Accra

Dear Sir/Madam

The researcher of the above topic is a post-graduate student of the University of Cape Coast (UCC). This questionnaire is meant to achieve the aforementioned topic, and successful completion of which will lead to the award of Business Administration (MBA) Degree in Management. The researcher therefore would be glad if respondents could be as frank as possible. The researcher assures respondents of conceal the identify of all persons who provided information for the study and that information provided will be used for academic purpose only.

SECTION A: Demographic Characteristics of Respondents

1). Gender

A. Male [ ] **B.** Female [ ]

2). Age distribution of respondent

A. Less than 20yrs [ ] **B**. 20-29 yrs [ ] **C.** 30-39yrs [ ] **D.** 40-49yrs [ ]

E. 50yrs and above [ ]

3) Educational level of Respondent

A. SHS/O-Level/A-level [ ] **B**. Diploma [ ] **C.** Degree/Professional [ ] **D.** Masters/PhD [ ]

4). Employment status/Sector of employment

A. Public [ ] **B**. Private [ ] **C.** Self-employed [ ] **D.** unemployed [ ]

5). Average monthly income?

A. Less than GHS1,000 [ ] **B**. GHS 1,000-1,999 [ ] **C.** GHS 2,000-2,999 [ ]

D. GHS3,000 and above [ ]

Section B: Opinion of Distance Students Regarding Distance Education in Ghana

This section seeks to assess the perception of distance students regarding distance tertiary education in Ghana. Please indicate your opinion using the following scale:

1= strongly disagree
2= Disagree
3= Neutral
4= Agree
5= strongly agree

		Choose only one number				
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	Distance education in Ghana is well structured to meet the demand of students	**1**	**2**	**3**	**4**	**5**
2.	There are adequate number of courses for the distance learning program	**1**	**2**	**3**	**4**	**5**
3.	The course contents are adequate to ensure effective training of students	**1**	**2**	**3**	**4**	**5**
4.	A good number of course materials exist for the program	**1**	**2**	**3**	**4**	**5**
5	The instructors of the program are very impactful	**1**	**2**	**3**	**4**	**5**
6	Students have good relationship with their instructors	**1**	**2**	**3**	**4**	**5**
7	There are learner support services with distance education	**1**	**2**	**3**	**4**	**5**
8	The learning environment is appropriate for effective academic work	**1**	**2**	**3**	**4**	**5**
9	The structure of the program is flexible	**1**	**2**	**3**	**4**	**5**
10	The quality of distance learning comparable to a traditional classroom setting	**1**	**2**	**3**	**4**	**5**
11	I prefer distance learning to traditional classroom setting	**1**	**2**	**3**	**4**	**5**

12	Distance education has helped to bridge the gap between work and school	**1**	**2**	**3**	**4**	**5**

Please, in indicate the perception of distance tertiary education in Ghana.

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SECTION C: Factors distance learners consider important in their choice of distance education at the tertiary level in Ghana

This section seeks to identify the factors considered important by distance learners in their choice of distance education at the tertiary level in Ghana Please respond by using the following Five-Point Likert type Scale.

1= Not important
2= Less important
3= Neutral
4= important
5= Very important

		Choose only one number				
	Factors	**Not important**	**Less important**	**Neutral**	**Important**	**Very important**
1.	Career development	**1**	**2**	**3**	**4**	**5**
2.	Time flexibility	**1**	**2**	**3**	**4**	**5**
3.	Interest in subject matter	**1**	**2**	**3**	**4**	**5**
4.	Working with teachers from other schools	**1**	**2**	**3**	**4**	**5**
5	Reputation of the course	**1**	**2**	**3**	**4**	**5**
6	Reputation of the instructor	**1**	**2**	**3**	**4**	**5**
7	Cost affordability	**1**	**2**	**3**	**4**	**5**
8	Working with students from other schools	**1**	**2**	**3**	**4**	**5**
9	Reputation of school	**1**	**2**	**3**	**4**	**5**

10	Curiosity in how distance learning works	**1**	**2**	**3**	**4**	**5**
11	Greater use of technology	**1**	**2**	**3**	**4**	**5**

Please, in your opinion, indicate the factors you consider important in your choice of distance education at the tertiary level in Ghana

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Section D: Satisfaction Students of Distance Education in Ghana

This section seeks the level of satisfaction of students of distance education in Ghana. Please indicate your response using the following scale:

1= Very Dissatisfied
2= Dissatisfied
3= Neutral
4= Satisfied
5= Very Satisfied

		Choose only one number				
		Very dissatisfied	**Dissatisfied**	**Neutral**	**Satisfied**	**Very Satisfied**
1.	The structure of distance education meets my expectation	**1**	**2**	**3**	**4**	**5**
2.	The course content of distance education meets my expectation	**1**	**2**	**3**	**4**	**5**
3.	The environment of distance education meets my expectation	**1**	**2**	**3**	**4**	**5**
4.	The instructor-student of distance education meets my expectation	**1**	**2**	**3**	**4**	**5**
5	The grading system of distance education meets my expectation	**1**	**2**	**3**	**4**	**5**
6	The cost of distance education meets my expectation	**1**	**2**	**3**	**4**	**5**
7	The quality of distance education meets my expectation	**1**	**2**	**3**	**4**	**5**

8	The training received will be adequate to meet the demand of work	**1**	**2**	**3**	**4**	**5**
9	The training received from distance education makes me proud	**1**	**2**	**3**	**4**	**5**
10	Overall, distance education meet my expectation	**1**	**2**	**3**	**4**	**5**

Please, in your opinion, indicate the rank the level of satisfaction of students of distance education at the tertiary level in Ghana (**1=Very ineffective to 10=Very effective**)

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Section E: Challenges Students of Distance Education faces

This section seeks to assess the challenges students of distance education face. Please respond using the following scale:

1= strongly disagree
2= Disagree
3= Neutral
4= Agree
5= strongly agree

		Choose only one number				
		Strongly disagree	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
1.	Difficulty in accessing distance education	**1**	**2**	**3**	**4**	**5**
2.	Rigorous requirements for meeting the needs of distance education	**1**	**2**	**3**	**4**	**5**
3.	The course contents are inadequate to ensure effective training of students	**1**	**2**	**3**	**4**	**5**
4.	A good number of course materials do not exist for the program	**1**	**2**	**3**	**4**	**5**
5	The instructors of the program are not very impactful	**1**	**2**	**3**	**4**	**5**
6	Students have poor relationship with their instructors	**1**	**2**	**3**	**4**	**5**

7	There are inadequate learner support services with distance education	**1**	**2**	**3**	**4**	**5**
8	The learning environment is not appropriate for effective academic work	**1**	**2**	**3**	**4**	**5**
9	The structure of the program is not flexible	**1**	**2**	**3**	**4**	**5**
10	The quality of distance learning is poor	**1**	**2**	**3**	**4**	**5**
11	The cost for distance education is high	**1**	**2**	**3**	**4**	**5**
12	There is overloaded curricular	**1**	**2**	**3**	**4**	**5**

Please, in your opinion, indicate some of the challenges students of distance education face

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