



Distance Learning and Electronic Learning (E-Learning): Are They the Same? An Overview of Some Tertiary Institutions in Ghana

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ABSTRACT

Research has shown that there are various misconceptions about the equality of Distance Learning and Electronic Learning (E-Learning). Distance Learning and E-Learning do sometimes overlap or are used interchangeably in some cases but are not identical. The use of ICT in education clearly distinguishes Distance Learning from E-Learning, but up to date these two educational terms are sometimes still used interchangeably as synonyms. Distance Learning can occur in a traditional classroom without the use of ICT, but implementation of E-Learning is impossible without ICT integration. Sometimes these educational terms can be merged together to create an educational scenario but technically they are different. In order to contradict and make certain of these misconceptions, we used the current practices of some educational institutions in Ghana as case studies. Our research findings showed that some of our selected tertiary institutions in Ghana practice only Distance Learning or E-Learning while the others combine Distance Learning and E-Learning as educational modes.

Keywords: *Distance Learning, Electronic Learning (E-Learning), ICT, Tertiary Education, Ghana*

1. INTRODUCTION

Sequel to advances and proliferations of Information and Communication Technologies (ICTs), Education Modes have changed from Traditional Face-to-Face (F2F) to different types such as Distance Learning, Electronic Learning (E-Learning) and Mobile Learning (M-Learning). This impact of ICT on education has resulted in technological usage in education. Desktop computers are used in E-Learning while portable enabled-Wi-Fi devices such as Personal Digital Assistant (PDAs), Mobile Phones and Smartphones are used in M-Learning which allows learning/education to take place anywhere and anytime provided there is wireless network coverage in that particular area [1]. Face-to-Face (F2F) education usually occurs in a classroom in which a teacher/tutor/instructor/lecturer imparts educational knowledge to students in an interactive manner. The location is solely the lecture hall or classroom and almost all activities pertaining to learning is done in the classroom. In Ghana and other developing countries, population increase and mismatch of available educational infrastructure and resources has made tertiary institutions adopt and implement other educational modes such as distance learning and e-learning to act as a supplement for the large number of people who qualify for an educational opportunity but cannot gain access to tertiary education. Currently, some Universities and Polytechnics in Ghana have adopted a Distance Learning strategy by locating lecture halls and classrooms at different locations and sites in Ghana that are away from their main campuses through various business models. The introduction of Distance Learning by these institutions has really helped to fine tune both workers and non-workers access to tertiary education in

Ghana. ICT has proliferated tremendously after the introduction of Distance Learning, which has improved access to tertiary education by introducing other educational modes such as e-learning and mobile learning which are very beneficial, however mobile learning is very scarce in Ghana [2]. Implementation of ICT in education in Ghana has been further transferred to High Schools and Primary Schools so that Ghanaian students learn ICT in their education before entering the tertiary level in order to familiarize and adapt to an e-learning educational mode.

In Ghana there are six (6) public universities, ten (10) polytechnics and about 50 private universities. These numbers are not adequate to absorb all high school graduates. Therefore various institutions in conjunction with Ministry of Education (MoE), Ghana and National Accreditation Board (NAB), Ghana have strategized and implement different educational modes such as Distance Learning and E-Learning and this paper focuses on outlining some of these strategies in some selected tertiary institutions in Ghana. Some factors that have contributed to the introduction and implementation of other educational modes aside traditional face-to-face education include:

- Existing tertiary institutions in Ghana are unable to meet the high demand for tertiary education, which has arisen out of the rapid growth in population.
- Mismatch between existing academic facilities and physical infrastructure on one hand, and the increasing number of students admitted into tertiary institutions on the other.



- The existing structures and facilities that tertiary institutions provide are limited and in some cases, there is no access for people with disabilities and special needs.

This paper is formulated, structured and arranged/outlined chronologically as follows: Section 2 presents Justification of Selected Institutions and Limitations of the Study followed by a Literature Review of Distance Learning and E-Learning in Sections 3. Sections 4, 5 and 6 of the paper outline our Research Objectives, Related Work and Research Methodology respectively. This is followed by subsections of our Data Collection Procedure, Analysis and Interview Responses. Section 7 of the paper presents an Overview of Distance Learning and E-Learning in Some Ghanaian Tertiary Institutions. Section 8 elaborates on our Research Findings and Discussions. The paper is finally concluded with a recommendation in Section 9.

2. JUSTIFICATION OF SELECTED INSTITUTIONS AND LIMITATION OF THE STUDY

This research focused on the premier public Universities in Ghana, namely: University of Ghana, Kwame Nkrumah University of Science and Technology (KNUST) and UCC; two Polytechnics in Ghana, Accra and Ho Polytechnics and two private universities, namely: Ghana Telecom University College and University of Applied Management. Although, according to the National Accreditation Board, Ghana has six (6) public universities, approximately fifty (50) private universities¹ and ten (10) polytechnics², our research cannot cater for the entire population. Therefore we limited our research to the three premier public universities in Ghana, two Polytechnic in Ghana and two (2) private universities in order to have an overview of what educational modes these institutions practice i.e. distance learning, e-learning or both. A future work of this research could be to use all tertiary institutions in Ghana as a case study but this research paper is limited to the selected institutions.

3. LITERATURE REVIEW

3.1 Definition of Distance Learning

Distance education at university level has existed since the early half of the nineteenth century [3]. The idea of a distance

¹ http://en.wikipedia.org/wiki/List_of_universities_in_Ghana

² http://en.wikipedia.org/wiki/List_of_polytechnics_in_Ghana

teaching in tertiary institutions adopts the opposite procedure of a campus-based university. Instead of assembling students from dispersed locations in one place/classroom as in traditional education, it tries to possibly reach out to students wherever they live or wish to study [4]. Therefore as described above, Distance Education/Learning without ICT is the same as Traditional Education/Learning at a distance away from the main campus of a tertiary institution. Tertiary institutions in Ghana such as University of Ghana (UG), Kwame Nkrumah University of Science and Technology (KNUST) and the University of Cape Coast (UCC) have all adopted Distance Learning as part of their modes of education.

3.2 Definition of Electronic Learning (E-Learning)

The plan to use the computer as a learning tool has been around since the advent of computers. E-Learning can be said to be a product of this plan. E-Learning has been defined by different people and organizations depending on the environment and circumstances they find themselves.

Electronic Learning usually called 'E-Learning' is defined by the New Zealand Ministry of Education as "learning that is enabled or supported by the use of digital tools and content. It typically involves some form of interactivity, which may include online interaction between the learner and their teacher or peers". Concepts such as distance learning, telelearning and computer supported learning cover a wide range of similar learning methodologies. The Danish Ministry of Science and Innovation defines E-Learning as "teaching that is all done in the classroom and where computers are used as learning tools". The European Union (EU) E-Learning Action from 2001 also defines E-Learning as "the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration" [5].

3.3 Relationship and Differences between Distance Learning and E-Learning

Information and Communication Technology (ICT) can broadly be defined as the tools, facilities, processes, and equipments that provide the required environment with the physical infrastructure and the services for the generation, transmission, processing, storing and disseminating of information in all forms including voice, text, data, graphics and video. From the definition, ICT has a role to play in any country's educational development [6].

It must be noted that E-Learning and Distance Learning or Distance Education are not the same. The lack of distinction between E-Learning and distance education accounts for much of the misunderstanding of the roles ICT play in higher



education. Many policy makers, scholars and practitioners in higher education use the terms ‘E-Learning’ and ‘distance education’ interchangeably as synonyms, emphasizing the continuous blurring of boundaries between conventional and distance education [7]. Distance Education can be done without the use of ICT and moreover distance alone cannot be a necessary condition for application of E-Learning, although one of the most important advantages of E-Learning is the flexibility it offers with regard to distance. According to [7], Distance education and E-Learning do overlap in some cases, but are by no means identical. Some researchers like [8] have proposed that because technological changes have been so extensive, traditional approaches to distance education are no longer adequate and fail to meet the needs of new distance learners.

Today, many E-Learning models of tertiary education find their roots in conventional distance education. In the traditional lecture-based education typically found in large or public universities in Ghana, lecturers and students are at the same place (often a lecture room) at the same time.

Teachers are the principal source of knowledge delivered to students in the traditional approach. Students can use supplementary means to obtain knowledge, such as books and manuals; here the lecture is the main key to learning. Distance Learning occurs in the same scenario. When ICT is introduced as a medium of instruction by the teacher and usage by student/learners whether at a distance or the same location of the learning and teaching activity, then e-learning comes to fruition. In E-Learning systems, the principal source of knowledge is not the teacher, but knowledge-bases collected, assembled and sequenced by the teacher, along with links to other sources of information, typically accessible via the internet. The teacher’s role shifts from lecturer to that of course developer and, once a course is in session, the teacher’s role shifts to a course facilitator [6].

4. RESEARCH OBJECTIVES

The main objectives of this research paper are to:

- Analyse the differences and relationship between distance learning and e-learning.
- Identify some tertiary institutions in Ghana that practice distance learning or e-learning or a combination of both in order to determine which educational modes are actually being practiced by the selected tertiary institutions.

5. RELATED WORK

Within the past 10-15 years, research in the area of the misconceptions involving distance learning and e-learning educational modes have been done by some researchers extensively. Research has distinctively and appropriately shown the relationship and differences between distance learning and e-learning with emphasis on the issues that they do sometimes overlap and are also sometimes used interchangeably as synonyms but are no means identical.

According to (*Guri-Rosenblit, 2005*) [7], since the emergence of the new Information and Communication Technologies (ICTs), many have related to distance learning and e-learning as the new generation of education, and some have referred to their implementation in academia as challenging the very existence of campus-based universities. Many policy makers, scholars and practitioners in higher education use these two terms interchangeably as synonyms. But the fact is that distance education in most higher education systems is not delivered through the new electronic media, and vice versa – e-learning in most universities and colleges all over the world is not used for distance education purposes. ‘Distance education’ and ‘e-learning’ do overlap in some cases, but are by no means identical.

Guri-Rosenblit (2005) [7] examined the erroneous assumptions on which many exaggerated predictions as to the future impact of the ICT were based upon, and concludes her article by highlighting the future trends of ‘distance education’ and ‘e-learning’ in academia.

According to (*Moore et al., 2011*) [9] it is not uncommon that researchers face difficulties when performing meaningful cross-study comparisons for research. Research associated with the distance learning realm can be even more difficult to use as there are different environments with a variety of characteristics. *Moore et al., (2011)* [9] implemented a mixed-method analysis of research articles to find out how they define the learning environment. In addition, they surveyed 43 persons and discovered that there was inconsistent use of terminology for different types of delivery modes. Their results reveal that there are different expectations and perceptions of learning environment labels: distance learning, e-Learning, and online learning.

6. RESEARCH METHODOLOGY

- **Interview:** Due to scarcity of particular research data required from University of Cape Coast (UCC), one of the researchers conducted an interview with a senior staff of University of Cape Coast (UCC) to



obtain knowledge and information about current educational modes being adopted and used in UCC.

- **Literature Review:** We reviewed related work of researchers and integrated/exploratory literature about ICT in Education, Distance Learning and E-Learning in order to gain adequate knowledge of these educational modes to compare them to educational modes being adopted by tertiary institutions in Ghana.

	UCC in all ten regions of Ghana
Negative Response	E-Learning is rare and plans are being taken for it to be adopted

6.1 Data Collection Procedure and Analysis

Data collection for this research involved responses from interview in the case of UCC and relevant literature from websites and documents/reports of the other selected institutions. The Interview was used as data collection procedure for UCC because it was difficult obtaining relevant data through websites and documents/reports as compared to the other institutions. The results of the interview responses and collection of the relevant data were used for the data analysis. In order to obtain results of the data analysis, we studied the data collected and used the literature review to ascertain which of the case study institutions practiced distance learning, e-learning or both as depicted in table 4.

6.2 Interview Responses from University of Cape Coast (UCC), Ghana

A management staff of the Student Records and Management Information Section (SRMIS) in the University of Cape Coast (UCC) was interviewed informally by one of the researchers through Skype to solicit information about e-learning and distance learning at UCC. The 30 minute interview which took place on 14/03/2012, asked six (6) questions about e-learning and distance learning progress at UCC. Responses from the interview showed that distance learning is practiced more at UCC and e-learning is rare. Further responses during the interview revealed that every region in Ghana had a UCC Distance Learning Centre with a code as depicted in table 3. Table 1 shows a summary of the interview responses.

Table 1: Interview Responses from UCC

Number of Persons Interviewed/Interviewee	One (1)/Senior Staff of SRMIS, UCC
Medium Used for Interview	Skype Audio – Online Social Network Site
Number of Questions Asked	Six (6)
Category of Questions Asked	Distance Learning and E-Learning in Relation to UCC
Positive Responses	Distance Learning offered by

7. AN OVERVIEW OF DISTANCE LEARNING AND E-LEARNING IN SOME GHANAIAN TERTIARY INSTITUTIONS

For about ten years, the universities in Ghana has had the unpleasant duty of turning away a large number of qualified applicants every year as a result of their inability to admit not even half of the applicants (*NCTE Report, 2006*) [10].

This situation has been attributed to limited and deteriorating facilities. Coupled with this limited facilities is the rising cost of providing quality education at the secondary and tertiary levels. The Government of Ghana is finding it increasingly difficult to fund tertiary education all alone. As a result of the above reasons and many others the government of Ghana has adopted distance education as a viable complement to the conventional face-to-face education. This step is inspired by the vision that all Ghanaians should have access to all forms of education and training regardless of where they live.

Some tertiary institutions in Ghana practice E-Learning and distance learning. Some institutions outside the shores of Ghana especially in the UK, Denmark and Malaysia also offer different programmes of study in Ghana through distance education and E-Learning.

Some of the tertiary institutions in Ghana selected for our research overview on distance learning and e-learning are elaborated below.

7.1 Kwame Nkrumah University of Science and Technology (Knust), Kumasi, Ghana

At KNUST, both Distance Learning and E-Learning educational modes are offered.

7.1.1 The Institute of Distance Learning, KNUST

The Institute of Distance Learning (IDL) at KNUST was established as the Faculty of Distance Learning (FDL) in 2005. Since 2005, IDL has been offering undergraduate and postgraduate programmes to the general public through distance education. The various learning centres across the various regions in Ghana are outlined below. Altogether, there are eight learning centres in eight regions of Ghana. The target of IDL however, is to establish learning centres in all the ten regions of Ghana within the next four (4) years. The distance learning centres current linked with IDL are presented below (*IDL, KNUST, 2009*) [11].



- Western Region -Takoradi Polytechnic
- Brong-Ahafo Region -Forest Resource Technology Campus, Sunyani
- Ashanti Region - KNUST
- Eastern Region - GRATIS Foundation Koforidua
- Northern Region - Tamale Polytechnic
- Volta Region -Ho Polytechnic
- Central Region - Cape Coast Polytechnic
- Greater Accra Region - Accra Polytechnic

The Accra and Kumasi centres provide the bulk of the Institute's students. Table 2 outlines and depicts the Percentage Share of IDL Students by Centre as at 2009/2010 academic year. This scenario and trend are expected to continue into the future (*IDL, KNUST, 2009*) [11].

Table 2: Percentage Share of IDL Students by Centre (2009/2010)

Centres	Undergraduates	Postgraduates	Total	Percentage
Accra	463	583	1,046	40.6
Kumasi	358	598	956	31.1
Takoradi	-	163	163	6.3
Sunyani	-	113	113	4.3
Ho	-	105	105	4.1
Koforidua	-	96	96	3.7
Tamale	-	95	95	3.6
TOTAL	821	1,754	2,575	100

7.1.1.1 Administration of the IDL Centres of KNUST

The Dean of IDL runs the Kumasi centre as well as the general coordination of all the centres. The KNUST Accra representative, and the Assistant Registrar at the Sunyani campus are Coordinators at the Accra and Sunyani centres. The Koforidua, Ho, Takoradi and Tamale centres are coordinated by non- university staff, appointed by the Institute (*IDL, KNUST, 2009*) [11].

7.1.1.2 Programmes offered by IDL, KNUST

The programmes offered by IDL involve both undergraduate and postgraduate programmes. Current undergraduate programs include BSc. Computer Engineering, BSc. Building Technology (4th year), BSc. Quantity Surveying & Construction Economics, BSc. Construction Technology & Management, BSc. Actuarial Science, BA. Sociology & Social Work, BSc. Electrical and Electronic Engineering (Top-up), BSc. Telecommunication Engineering (Top-up) and BSc. Computer Science (Top-up)

The postgraduate programmes currently run by IDL include: Commonwealth Executive Master of Business Administration (CEMBA), Commonwealth Executive Master of Public Administration (CEMPA), MSc. Industrial Mathematics, MSc. Postharvest Technology (Horticulture) and MSc. Environmental Science (*IDL, KNUST, 2009*) [11].

7.1.1.3 Learner Support Services Offered by IDL, KNUST

IDL, KNUST provides the following Learning Support Services : Print materials / e-learning material, supply of learning materials in print/textbooks, visit to the websites (www.kvcit.org & www.idl.knust.edu.gh), facilitated face-to-face sessions, provision of timetable, provision of qualified facilitators for all centres, institutional identity, orientation, matriculation & congregation, KNUST ID cards, and course registration (*IDL, KNUST, 2009*) [11].

7.1.1.4 Future Directions of IDL, KNUST

A press release in the Ghana Daily Graphic Newspaper on Tuesday, December 15, 2009 [12] stated that KNUST is to establish an Accra Campus. The Council of the University (KNUST, Kumasi) at its 204th meeting held on Friday August 28, 2009, adopted a resolution for the establishment of an Accra Campus of the Kwame Nkrumah University of Science and Technology.

This is in the keeping with the KNUST's Strategy Plan, PLAN2K14, aimed at providing greater access to science and technology education and training in order to advance Ghana's technological development. To this end, the University has initiated discussions with Government and the National Council for Tertiary Education (NCTE) of Ghana with a view to acquire appropriate facilities to take of the Campus.



The Accra Campus would be a technology driven 21st century institution using ICT for its programme outreach. While maintaining its time honoured University traditions, it would also serve as the University's VIRTUAL CAMPUS coordinating its distance and life-long learning programmes across the country. The Accra Campus of KNUST would concentrate on Applied Science and Technology Programmes of Study with a focus on Telecommunications Engineering, Computer Engineering, Electrical Engineering, Biomedical Engineering, Computer Science, Informatics, Computer and Information Technology, Communication Design etc.

These programmes would be offered through Full Time or Part Time Distance Education and Life-long learning modes interspersed with short term courses at Graduate, Undergraduate, Diploma and Certificate levels. Through the use of distance education and E-Learning, KNUST will establish the Accra Campus, and continue in its strident drive to provide greater access for the training of needed human capital in the area of Science and Technology for Ghana's socio-economic growth and industrial development.

7.1.2 The Electronic Learning (E-Learning) Centre, KNUST

The Kwame Nkrumah University of Science and Technology is one of the African Universities currently employing E-learning modes of education. The E-learning center of the University is a well-furnished ultra-modern computer Laboratory with up-to-date technology to support this form of education.

The E-learning center which is under the University's Information Technology Center (UITC) aims to make learning flexible and distance learning more suitable (e-Learning Centre, KNUST, 2012).

Former President of India Dr. A.P. J. Abdul Kalam, who had conceived the lofty idea of the Pan-African e-Network for the accelerated socio-development of Africa has encouraged an e-learning mode between Africa and India where with e-learning and technology students in certain African universities can study in universities in India and acquire a certified degree from their universities at a relatively lower cost than being there in person. This is the first of its kind in Africa and Kwame Nkrumah University of Science and Technology is proud to be one of the first universities in Africa to benefit from this Innovative and educative partnership (*e-Learning Centre, KNUST, 2012*) [13]. Currently only postgraduate programmes are offered by the e-learning centre of KNUST.

These programmes include MBA programmes as well as Postgraduate Diploma and an MSc. Programme in Information Technology (IT) (*e-Learning Centre, KNUST, 2012*) [13]

7.2 University of Ghana (Ug), Legon, Accra, Ghana

7.2.1 Institute of Distance and Continuing Education (IDCE)

It is in recognition that as education in Ghana faces significant challenges, the most universal and complex of objective are related to relevancy and ensuring equitable access for the growing number of individuals seeking education at the tertiary level with increasing pressure on limited state resources. As technology continues to transform how students are educated, more students will use Open and Distance Education as the preferred mode of learning (*IDCE, UG, 2006-2008*) [14].

In order to meet the above objective, the IDCE at the University of Ghana recently received major grants and loans from the Government of the People's Republic of China (P.R.C.) in the amount of \$8.2 million to equip the institute with the necessary hardware, software and other accessories for the implementation of ICT-based Distance Education (*IDCE, UG, 2006-2008*) [14].

The project, to be managed by Unisplendour Software System Co., Ltd, Tsinghua University, China is a component of the University of Ghana's 5-year IT Strategic Plan, which is also in line with the National ICT Policy on Education developed by the Ministry of Communications and the Ministry of Education, Science and Sports (*IDCE, UG, 2006-2008*) [14].

For about 60 years, the IDCE at the University of Ghana has become the vehicle that has transported the University of Ghana's rich traditions of teaching, learning, and research into Ghanaian homes. With expanded vision, the Institute is now in a position to transform itself into a more visible, resource-enhanced, dynamic Institute that is responsive in providing lifelong learning opportunities and distance education to all Ghanaians to meet their diverse learning needs for academic, personal, and professional growth. ICDE mandate re-affirms the University of Ghana's resolve to provide wider educational access to Ghanaians while maintaining jobs and fulfilling family and other obligations (*IDCE, UG, 2006-2008*) [14].

The Institute of Continuing and Distance Education (ICDE) is one of the key institutions through which Ghana's premier university carries its presence, standards and curricula into Ghanaian cities, towns, villages, and communities. To advance its central mission to become a centre of excellence for the efficient delivery of university-based continuing and distance education to meet the challenges of national development and



global competition, the Institute offers courses leading to Diploma, Bachelors, M.A., M.Phil., Ph.D. in Adult Education; Youth in Development Work; and short courses for community leaders. Using interdisciplinary, comparative, gender-sensitive, community-based, interactive learning perspectives, and technology, the Institute's highly motivated and committed faculty and staff apply their specializations in all fields of study to illuminate the relevance of higher education for empowering individuals, communities, and nations for development and poverty reduction [14].

7.2.1.1 Advantages of the IDCE at University of Ghana

The Institute of Continuing and Distance Education at the University of Ghana enjoys the following strategic advantages (IDCE, UG, 2006-2008) [14]:

- Research at IDCE covers field studies, evaluation studies, action research and experimental research in all ten (10) regions of Ghana.
- IDCE presently has thirteen (13) Learning Centres in Ghana and extend the resources of the University of Ghana to a wide of Ghanaians in recognition of their ability to learn regardless of age, sex, religion, ethnicity, place and region of residence.
- IDCE runs the University of Ghana's Distance Education programme which now makes it possible for the University to offer Degree by distance to many people who otherwise would not have been able to access higher education.
- Physical resources such as printing press, library and educational infrastructure have been made available in all IDCE centres in the ten (10) regions of Ghana.
- IDCE has well qualified and innovative staff from interdisciplinary background with the ability to collaborate with several departments and organizations, and a track record of delivering continuing and adult education in alternative modes and methods.

7.2.2 E-Learning at the University of Ghana

In terms of e-learning, University of Ghana uses the KEWL.NextGen. KEWL.NextGen is an advanced e-learning system (sometimes referred to as a learning management system, a virtual learning environment) with features similar to common proprietary systems. It is free software (open source) and available for download from <http://avoir.uwc.ac.za/>. KEWL.NextGen was developed based on several years of experience in e-learning at the University of the Western Cape and partner institutions using its predecessor KEWL, and is under active development by a

team of developers in 11 African higher education institutions (KEWL.NextGen, UG, 2012) [15].

7.3 University of Cape Coast (Ucc), Cape Coast, Ghana

The University of Cape Coast established the Centre for Continuing Education (CCE) in 1997. The Centre is an affiliated member of the West African Distance Education Association (WADEA). The Centre, apart from being a sub vented sector of the Ministry of Education, maintains active collegial relationship with the sister universities in Ghana and Simon Fraser University of Canada. The Centre has been established, primarily, to (UCC, 2003-2012) [16]:

1. Provide opportunities for people to pursue higher education; train more professional teachers for all levels of Education in the Ghana Education Service (GES).
2. Train high caliber personnel for national development.
3. Raise the professional competence of serving teachers and personnel of the Ghana Education Service (GES), as well as accounting and secretarial personnel in civil/public service, commerce and industry through Continuing Education.
4. Provide opportunities for applicants who, even though qualify for admission, fail to enter the University due to constraints in physical facilities.

The main focus of the Centre, currently, is directed at (UCC, 2003-2012) [16]:

1. Mounting distance education programme in leading to the award of Diploma, Post-Diploma Degree and Master's Degree.
2. Limiting the Diploma in Basic Education (DBE) programme, initially, to serving teachers in the Ghana Education Service, such as certificate 'A', Pupil Teachers and specialists.
3. Mounting all the other viable academic programmes in the University, especially B.Com and Bachelor of Management Studies (BMS) on distance.
4. Using the multi-media mode of delivery for its distance education – print, audio cassettes, video cassettes, radio broadcast; television, etc.

7.3.1 Study Centres (Distance Education Centres) of CCE

CCE has centres in all the regional capitals and some district capitals in the country. It currently has 33 study centres



nationwide. These form a major component of the administrative structure of the programme. The centre is headed by a Director, who has tutors under him and report to him. At the regional centres, there are regional resident tutors. In regions where there are no resident tutors, there are co-coordinators who facilitate the smooth running of programmes. The main function of the study centres is to

serve as avenues for interaction with staff and students, tutoring and counseling; providing physical facilities such as classrooms, laboratories and libraries for assisting students and organizing lectures; discussion groups, workshops and seminars.

Details of CCE's study centres in the regional capitals can be found in table 3 below.

Table 3: Regional Study Centres of CCE, UCC in Ghana, Source: Interview with UCC Senior Staff

REGION	STUDY CENTRE	CENTRE CODE
Ashanti	Kumasi Polytechnic	001
Brong Ahafo	Sunyani Polytechnic	002
Central	University of Cape Coast	003
Eastern	Koforidua Polytechnic	004
Greater Accra	Zenith College	005
Northern	Tamale Polytechnic	006
Upper East	Bolgatanga Polytechnic	007
Upper West	Wa Secondary School	008
Volta	Ho Polytechnic	009
Western	Takoradi Polytechnic	010

Tutors are resource persons appointed by the university. They are specialists in the subject areas they teach. CCE currently has over 900 tutors; the tutors meet students from time to time to guide them in subject areas of their specialization. Students are expected to attend a monthly face-to-face with their course tutors at the study centres. Distance learning has proven to save cost to both the University and the student. UCC gains more revenue because more students can be admitted because of the distance learning methodology currently in progress.

7.4 Aalborg University, Denmark and Ghana Telecom University College, Ghana

As we discussed above, E-Learning can be applied in distance learning or they can be combined. An example of this

approach is the Master of Information Communication Technologies (mICT) programme between Aalborg University, Denmark and Ghana Telecom University College (GTUC), Tesano, Ghana, which started in November 2007. The videoconferencing ICT facility is used by Aalborg University and GTUC for lecture delivery. The teaching format for the programme includes:

Seminars in Ghana, Interactive Courses based on Web-based Support, Face-to-Face Courses at the seminars, Video conferencing, Use of Distance Learning tools for Courses, Project Work Information, Dialogue with Teachers, Dialogue with Fellow Students, etc. Participants will from the beginning be introduced to a WEB based e-learning tool (UNIFLEX) so they can use it to access courses, communicate with teachers,



and also to ease collaboration within the groups (*GTUC, 2011*) [17].

The lectures and seminars for the mICT programme are delivered and facilitated by Professors of Aalborg University in Denmark through a video link with the students at GTUC. In a situation like this, the students of mICT don't need to travel to Denmark for lectures. They stay at a distance in Ghana and have the lectures when it is due through videoconferencing and ICT (*GTUC, 2011*) [17].

The mICT programme involves both distance learning and E-Learning. Distance learning is involved because of the lectures being facilitated at GTUC campus in Ghana, a distance away from Aalborg University, in Denmark. E-Learning is also involved because of the ICT technologies used such as videoconferencing. When the Professors of Aalborg University also visit GTUC for lectures and seminars, this procedure is still distance learning, since the students are still away from Aalborg University and the lectures are facilitated on a face-to-face bases without any ICT facility (*GTUC, 2011*) [17].

7.5 University of Applied Management, Germany (Ghana Campus)

Another University in Germany that offers distance education in Ghana, University of Applied Management has established a University in Ghana called University of Applied Management – Ghana Campus (UAM, Ghana). The University of Applied Management – Ghana Campus is located in Accra. UAM brings together business and science and have qualified and skilled professors from UAM, Germany that offer distance education to the students of UAM, Ghana. Degree programmes involving Bachelor and Master consisting of the following areas: Business Administration, Business Psychology and Sports and Event Management are all offered at UAM, Ghana (*UAM, Ghana, 2012*) [18].

The focus of the educational concept of UAM, Ghana is to combine the advantages of both distance and onsite programmes of study, thereby including the freedom of flexibility and online programmes with the opportunities for face-to-face and in-depth contact of onsite programmes (*UAM, Ghana, 2012*) [18].

Students come to Accra three times each semester for one week at a time to participate in coursework, complete exams, exchange ideas with classmates and professors and get academic coaches. During the time in between, students use the internet and the learning platform of UAM, Ghana to study online. There are times whereby virtual seminars in the form

of videoconferencing and audio conferencing takes place for interaction between students and professors and tutors in UAM, Germany. Coursework can be completed from the comfort of homes, while accessing both the course presentation and learning materials on a PC. Furthermore, students can communicate with instructors and professors at any time without being limited to short office hours (*UAM, Ghana, 2012*) [18].

7.6 Accra and Ho Polytechnics, Ghana in Conjunction with Liverpool John Moores University, UK

Accra and Ho Polytechnics, Ghana in conjunction with Liverpool John Moores University (LJMU) have set up a programme in which LJMU will organize top-up courses in (BSc Civil Engineering and BSc Construction Management) at Accra and Ho Polytechnics for qualified Higher National Diploma (HND) Building Technology and Civil Engineering graduates from Ghanaian Polytechnics (*Accra Poly Teller, 2009*) [19].

The programme was ratified by a Memorandum of Understanding (MOU) and a Memorandum of Agreement (MOA), which were both signed by both Polytechnics, and the Liverpool John Moores University (LJMU), UK (*Accra Poly Teller, 2009*) [19].

The programme, validated on October 27th 2009, is a top-up course which is to be delivered in three modules. The first of the three modules involves lecturers/professors (Flying Faculty) travelling from LJMU to Ghana from January of every year to deliver lectures at Accra and Ho Polytechnics. Distance learning which involves the use of LJMU's E-Learning platform, The BLACKBOARD, in Accra and Ho Polytechnics is the second module. The third module is a summer school to be run in LJMU from May to September of every year. The MOU and MOA would also pave way for collaboration in research, staff training and access to the e-library resources of LJMU by staff of Accra and Ho Polytechnics (*Accra Poly Teller, 2009*) [19].

8. RESEARCH FINDINGS AND DISCUSSIONS

From this research, most of the selected tertiary institutions in Ghana offer either distance learning, e-learning or distance learning combined with e-learning as educational modes and platforms. However we confirm through an interview the UCC is currently trying to offer e-learning at the distance learning centres of CCE. We summarized our findings below in table 4. From table 4 KNUST offers both distance learning and e-learning but they are two separate categories of programmes.



Students of IDL, KNUST engage in the traditional learning approach of education at a distance away from the main campus of KNUST without the use of ICT. Students of the e-learning center at KNUST use ICT support and a Learning Management System (LMS) for learning and hardly meet a lecturer, so face-to-face contact is very minimal.

University of Cape Coast solely practices distance learning through CCE's distance learning centres and they are yet to

involve e-learning procedures. University of Ghana offers both distance learning and e-learning but don't combine the two in one educational platform just like KNUST. In the case of Aalborg University and GTUC, University of Applied Management (UAM), Ghana Campus, Accra and Ho Polytechnics/LJMU, UK, both distance learning and e-learning are combined because ICT is used for lecture delivery (E-Learning) and lectures are facilitated a distance away from the main universities organizing the programme.

Table 4: Summary of Research Findings

S/N	TERTIARY INSTITUTION(S)	PROGRAMMES OFFERED	DISTANCE LEARNING	E-LEARNING	E-LEARNING COMBINED WITH DISTANCE LEARNING
1.	KNUST	Postgraduate and Undergraduate	Yes	Yes (UITC)	No
2.	University of Ghana (UG)	Postgraduate and Undergraduate	Yes	Yes (KEWL.NextGen)	No
3.	University of Cape Coast (UCC)	Postgraduate and Undergraduate	Yes	No	No
4.	GTUC/Aalborg University	Postgraduate and Undergraduate	Yes	Yes (UNIFLEX)	Yes
5.	University of Applied Management (UAM), Ghana Campus	Postgraduate and Undergraduate	Yes	Yes (UAM Learning Platform)	Yes
6.	Accra Polytechnic/LJMU, UK	Undergraduate	Yes	Yes (The BLACKBOARD)	Yes
7.	Ho Polytechnic/LJMU, UK	Undergraduate	Yes	Yes (The BLACKBOARD)	Yes

9. CONCLUSION AND RECOMMENDATION

9.1 Conclusion

In this paper we presented the misconceptions, relationships and differences between distance learning and e-learning. We used some tertiary institutions in Ghana to ascertain the fact that these educational modes and terms are different and should not be used as interchangeably as synonyms. Literature has also shown and proved that distance alone is not a justification for e-learning and that distance learning without the use of ICT is the same as traditional face-to-face learning at a distance. The use of ICT in learning through a LMS whether at a distance or on site is classified as e-learning.

9.2 Recommendation

This paper recommends that stakeholders of various tertiary institutions in Ghana and worldwide should not use distance learning and e-learning as synonyms interchangeably but try to understand these educational modes well and properly in order to implement them in their institutions.

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