

Post Graduate Students Readiness for Elearning (A Case Study at the College of Distance Education, University of Cape Coast)

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Abstract

The use of eLearning is changing teaching and learning processes from the sage on the stage to the guide on the side approach. Students can easily access their study materials on an eLearning platform regardless of time and space through digital means. In this research, Post Graduate students of the College of Distance Education (CoDE) of the university of Cape Coast, offering Business and Education programmes were assessed on their readiness for the use of the College of Distance Education's eLearning platform. A total number of 60 students enrolled for the 2015-2016 Academic Year using the eLearning platform were sampled for the study. A questionnaire was administered to all of the students to assess their perceived self efficacy in the use of ICT tools, their attitude towards eLearning and the perceived barriers to the use of an eLearning platform. Research findings showed that most students had a positive attitude towards the use of ICT tools and were ready to use the eLearning platform.

Key words: *eLearning, sage on the stage, guide on the side, readiness, attitude, self efficacy*

Introduction

The rapid pace of technological and economic developments has placed greater demands on education systems to function well. The crucial need for students is to focus on the importance of lifelong learning, that is, to continuously upgrade their knowledge and skills, to think critically and to inspire creativity and innovation (UNESCO, 2004). Recently, a new paradigm of teaching and learning processes have emerged. eLearning has emerged as a result of the rapid diffusion of Information and Communication Technology (ICT) in educational setups.

eLearning has been defined as the use of applications and processes such as web-based learning, computer-based learning, virtual classrooms and digital collaboration. It includes the delivery of content via internet, audio and videotape, satellite broadcast, interactive TV, and CD-ROM. The explosion of the knowledge age has changed the context of what is learnt through eLearning and this is a manifestation of a knowledge revolution. eLearning is basically a virtual learning environment where courses are delivered through digital means via the Internet (Cruthers, 2008). Bates (2005), also defines eLearning as a subcategory of distance education that specifically uses the Internet and the World Wide Web

Over the last decade and a half, distance education has undergone a period of considerable transformation. The growth of the internet and related technologies has resulted in a merging of eLearning into the routine practices of universities and has given distance education a new appeal.

Simply having eLearning facilities available in the universities will not guarantee their effective use. Regardless of the quantity and quality of technology placed in the universities, the key to how eLearning tools are used places a prime focus on students; who must have the competence and the right attitude towards technology (Kadel, 2005) and readiness of acceptance of use. Attitudes refers to one's positive or negative judgment about a concrete subject.

Technology helps students to achieve their educational goals and create new chances and choices. However, these chances and choices to use technologies that extend the learning

environment may be influenced by students' attitudes and behavioral intentions towards a new system of learning hence there arises the need to assess their perceptions and attitudes towards technology use in their learning leverage. Therefore, investigating post graduate students of the College of Distance Education, University of Cape Coast (UCC) student's readiness for eLearning is important for the success of improving university education and expanding the frontiers of distance education.

Statement of the Problem

The acceptance of new technologies has been the subject of a plethora of diverse studies in the past two decades to improve university education. The core investigation of the study is to assess student's readiness for eLearning, challenges students are likely to face when using the eLearning platform.

To this end, answers to the following research question were sought:

Research Questions

1. What is the attitude of CoDE UCC Post graduate students towards eLearning ?
2. How do CoDE UCC Post graduate students perceive their self-efficacy in the use of eLearning tools?
3. What are the likely barriers which may hinder the integration of eLearning at CoDE ?

Review of Related Literature

Attitude

Attitude refers to one's perception towards an object and it may be positive or negative. Student's attitudes towards computers then stand for students' evaluation and perceptions of self regarding how they feel about utilizing computers in their own learning practices. Student's attitudes towards eLearning is essential because students take on a major role in deciding on the extent to which computer use is allowed or hindered in learning.

Several studies (Deniz, 2007; Yuen & Ma, 2001) indicate that students' computer competence plays a key role in developing positive attitudes towards computers. On the other hand, Yildirim (2000) posits that computer anxiety and liking significantly affect student attitudes. That is students with low levels of computer anxiety and high levels of computer liking are identified with more positive attitudes whilst those with high anxiety and low levels of computer liking are identified with negative attitudes.

Measuring Students Readiness Towards eLearning

The concept of readiness for eLearning was proposed in the Australian vocational education and training sector by Warner, Christie, and Choy (1998). They defined readiness for eLearning in terms of three aspects:

1. Students' preferences for the form of delivery as opposed to face-to-face classroom instruction.
2. Student confidence in using electronic communication for learning and, in particular, competence and confidence in the use of Internet and computer-mediated communication.
3. Ability to engage in autonomous learning.

In order to concretize the readiness concepts, McVay (2001) developed a 13-item instrument for measuring readiness for eLearning. The instrument focused on student behavior and attitudes as the predictors. Later, Smith et al., (2003) conducted an exploratory study to test McVay's (2000) Readiness for eLearning questionnaire. The instrument was administered to 107 undergraduate university students in the United States and Australia and yielded a two-factor structure, "Comfort with e-learning" and "Self-management of learning". The former one, or the need for self-direction, was recognizable as an eLearning-focused dimension identified by Smith (2005) for its broader set of resource-based flexible learning materials. The latter one permeated the concept of distance education, regarding which Evans

(2000) commented that self-direction is a prerequisite for effective resource-based learning in distance education.

Motivation for eLearning

Schunk, Pintrich, and Meece (2008) define motivation as “the process whereby goal-directed activity is instigated and sustained” (p. 4). Research shows that motivated learners are more likely to undertake challenging activities, to be actively engaged, to enjoy and adopt a deep approach to learning, and to exhibit enhanced performance, persistence, and creativity (Schunk et al., 2008).

According to Deci and Ryan (2000), intrinsic motivation is a critical element in cognitive, social, and physical development because it is through acting on one’s inherent interests that one grows in knowledge and skills. Intrinsic motivation was found to be associated with a lower dropout rate, higher-quality learning, and better learning strategies (Czubaj, 2004).

Many students still find it hard to adapt and perform well when using university eLearning tools because of the demands and stress of the transition from secondary schools to tertiary education. Some students struggle to cope with the complexity of an eLearning environment and often have doubts about their learning performance (Saadé & Kira, 2009).

Computer and Internet Self-Efficacy

In eLearning, self-efficacy is considered to be a key psychological contributing factor to students’ success (Pajares, 1996). This is because it can alter students’ perceptions of their learning environment. Self-efficacy is not only a good predictor of learners’ academic outcomes but it helps learners well adjust and handle with the unfamiliar learning environment, even when they have little or prior eLearning experience (Swan, 2004).

Tsai and Tsai (2003) showed that students with high internet self-efficacy learned better than students with low internet self-efficacy in a web-based learning task. Tsai and Lin (2004) explored adolescents’ perceptions and attitudes regarding the internet among 636 high school students and found that females were more likely than males to perceive internet as pragmatic and that males’ enjoyment of the internet was greater than females’ corresponding enjoyment.

Barriers to the Use of ICT in Education

A challenge is anything that retards the progress of any set objective. It therefore means that the removal of one or more of these challenges or barriers such as the ones in ICT integration should assist perhaps significantly advance the process of integration. In a research report conducted by British Educational Communications and Technology Agency (BECTA) in 2004, a number of other important barriers were identified. These were: lack of confidence, accessibility, lack of time, fear of change, poor appreciation of ICT and age.

Research Methodology

Descriptive survey design was adopted in this study. The target population was all post graduate distance students of UCC in Ghana. Purposive sampling method was used to select sixty students, twenty students were selected from each of the study centres and the instruments used to collect data were questionnaire.

Results and Discussion

The socio-demographic characteristics considered in the study are sex, age, study centre and programme offering. Out of 60 students sampled for the study, 55 (91.6%) valid questionnaires were retrieved. The details of the responses are presented in Table 1.

Table 1: Demographic Characteristics of the Respondents

Item (Question: Q)	Frequency	Percentage
Q1: Sex:		
Male	35	63.6
Female	20	36.4

Q2: Age:

Under 25 Years	1	1.8
26 – 30 Years	18	32.7
31 – 35 Years	21	38.2
36 – 40 Years	9	16.4
41 – 45 Years	5	9.1
46 – 50 Years	1	1.8
51 – 55 Years	-	-
55 – 60 Years	-	-

Q3: Study Centre:

Accra	15	27.3
Cape Coast	20	36.4
Kumasi	20	36.4

Q4: Programme:

M.Ed Measurement and Evaluation	8	14.5
M.Ed Administration in Higher Education	13	23.6
M.Ed Education Psychology	7	12.7
M.COM in Accounting	6	10.9
MBA in Human Resource Management	6	10.9
MBA in Accounting	9	16.4
MBA in Finance	6	10.9

The data in Table 1 above shows that as many as 35 (63.6%) of the respondents were males while the remaining 20 (36.4%) were females. From the above it can be concluded that majority of the students used in the study were males.

The age distribution of the respondents indicates that 1 (1.8%) of them fell under the twenty five (25) age bracket. Eighteen (32.7%) and 21 (38.2%) of the respondents fell in the 26 – 30 and 31 – 35 age brackets. Nine (16.4%) and 5 (9.1%) of them respectively fell in the 36 – 40 and 41 – 45 age brackets. The remaining 1 (1.8%) fell in the 46 – 50 age bracket. None of the respondents fell in the age bracket of 51 – 55 and 56 – 60 bracket. The age distribution of the students generally reflects the situation within post graduate students age group in Ghana (Vorkeh, 2004).

Regarding the various programmes being offered, the data also shows that 6 (10.9%) of the respondents are offering Master of Commerce in Accounting, Master of Business Administration in Human Resource Management and Master of Business Administration in Banking and Finance. Again, 8 (14.5%) were offering Master of Education in Measurement and Evaluation, 13 (23.6%) offering Master of Education in Administration in Higher Education, 7 (12.7%) were doing Master of Education in Psychology and 9 (16.4%) were offering Master of Business Administration in Accounting. The respondents study centers are Accra, Cape Coast and Kumasi.

Research Question 1: What is the Attitude of CoDE UCC Post Graduate Students towards eLearning?

The successful integration of computers in educational environments depends, to a great extent, on students' attitudes towards eLearning. In trying to answer the objective above the following were looked at. The first thing was to find out from respondents whether they will consent to or go against the statement that I like using computers/laptop/iPad for research, I like to communicate with others using email to support my learning, I do not have enough time to use computers or laptop, I could look stupid if something goes wrong and Computers are a thing for young people.

Table 2: Students Responses on Usage of Computers/Laptop/iPad for Research

Responses	Frequency	Percentage
Strongly disagree	1	1.8

Disagree	1	1.8
Indecisive	3	5.5
Agree	17	30.9
Strongly agree	33	60.0
Total	55	100

Source: Field survey, 2015.

Table 2 shows that 1 (1.8%) and 1 (1.8%) of the respondents respectively strongly disagreed and disagreed to the assertion that they like using laptop/iPad. Three (5.5%) were indecisive whilst 17 (30.9%) agreeing. The remaining 33 (60.0%) strongly agreed. It can be concluded that majority of the respondents were convinced that they like using computers or laptop/iPad for research. Majority 53 (98.1%) of the respondents concluded that they have personal computers or laptop/iPad, which easily motivates them to use these devices. The findings of the study also support the work of Habitzel and his colleagues (2006).

Table 3: Students Responses on Communicating with Others Using Email

Responses	Frequency	Percentage
Strongly disagree	2	3.6
Disagree	4	7.3
Indecisive	5	9.1
Agree	32	58.2
Strongly agree	12	21.8
Total	55	100

Source: Field survey, 2015.

The findings in Table 3 reveals that 2 (3.6%) and 4 (7.3%) of the respondents respectively strongly disagreed and disagreed to the assertion that they like to communicate with others using email to support learning. Five (9.1%) were indecisive with 32 (58.2%) agreeing. The remaining 12 (21.8%) strongly agreed. From the above it can be concluded that majority of the respondents were convinced that they like to communicate with others using email to support learning. Majority, 54 (94.7%) of the respondents concluded that they use their laptop/iPad frequently when using eLearning services. The finding supports the work of Attwell (2007), who concluded that social networking support personal learning of students.

Table 4: Students Responses on Availability of Time to Use Computer or Laptop

Responses	Frequency	Percentage
Strongly disagree	10	18.2
Disagree	10	18.2
Indecisive	2	3.6
Agree	25	45.5
Strongly agree	8	14.5
Total	55	100

Source: Field survey, 2015.

Table 4 shows that 10 (18.2%) and 10 (18.2%) of the respondents respectively strongly disagreed and disagreed to the assertion that they do not have enough time to use computers. Two (3.6%) were indecisive with 25 (45.5%) agreeing. The remaining 8 (14.5%) strongly agreed. It can be concluded that majority of the students were convinced that they do not have enough time to use computers. However, this result contradicts the findings of Attwell (2007).

Table 5: Students Responses on If Something Goes Wrong when Using Computers

Responses	Frequency	Percentage
Strongly disagree	26	48.1
Disagree	14	25.9
Indecisive	7	13.0

Agree	5	9.3
Strongly agree	2	3.7
Total	55	100

Source: Field survey, 2015.

It can be seen that 26 (48.1%) and 14 (25.9%) of the respondents respectively strongly disagreed and disagreed that they could look stupid if something goes wrong when working with computers or laptop. Five (9.3%) of them agreed to the statement that they could look stupid if something goes wrong in the course of their usage of the computer and 2 (3.7%) of the respondents strongly agreed that they could look stupid if something goes wrong whenever they are using the computer.

In all, we can conclude that UCC post graduate distance students have positive attitude towards eLearning which predicts the need for learning computing skills which will in turn enhance ICT or computing skills.

Again, the mean helped to find out the overall attitude of the respondents towards the use of eLearning. The details are provided in Table 6.

Table 6: Mean of Means Attitude of the Respondents

Variable	Mean	Standard Deviation
Attitude	3.261	3.610

1 – 2.44 = Low/Poor; 2.45 – 2.9 = Moderate; 3.0 – 4.0 = High/Good

Source: Field survey, 2015.

Overall, the mean attitude implies that the respondents have good attitude towards the use of eLearning. The finding supports the work of Varank (2006), who concluded that students have positive attitude towards the use of eLearning in their studies.

Research Question 2: How do UCC Code Students Perceive their Self-efficacy on ELearning Learning?

Attempts were made to find students own self-efficacy on the use of the internet. The following were looked into: I know how to send and receive email messages, I can use various search engines to search for information, I would rather listen to a lecture than read the material from a computer screen, I would rather find out information using a computer than from a lecturer, I cannot learn using only computers; I need lecturer-student contact, I often use the discussion boards to assist my learning, I often use eLearning lecture materials to assist my learning and I often use eLearning lecture recordings for my studies.

Table 7: Students Responses on How to Send and Receive Email Messages

Responses	Frequency	Percentage
Strongly disagree	1	1.8
Disagree	-	-
Indecisive	-	-
Agree	2	3.6
Strongly agree	52	94.5
Total	55	100

Source: Field survey, 2015.

From Table 7, 1 (1.8%) of the respondents strongly disagreed that they know how to send and receive email messages, 2 (3.6%) agreed and 52 (94.5%) strongly agreed that they know how to send and receive email messages. None of the respondents disagreed nor were indecisive. From the above, it can be deduced that majority of the respondents knew how to send and receive email messages and that most graduate students know how to send and receive email messages.

Meanwhile, 1 (1.9%) of the respondents strongly disagreed that they can use various search engines to research for information, 4 (7.7%) of the respondents disagreed with the statement,

9 (17.3%) were indecisive, 26 (50.0%) of the respondents agreed that they can use various search engines to research for information and 12 (23.1%) strongly agreed that they can use various search engines to search for information. From the above, it can be deduced majority of the respondents knew how to use various search engines to research for information. This findings support the research of Swan (2004) who concluded that majority of post graduate students know how to use search engines to search for information on the internet.

Students were further asked to state their choice of preference in listening to a lecture and reading their learning materials from a computer screen. The details of their responses are provided in figure 1.

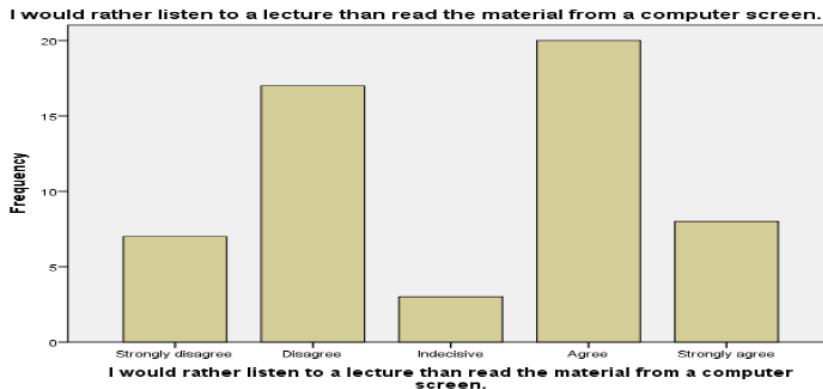


Figure 1: I would rather listen to a lecture than read the material from a computer screen

Source: Field survey, 2015.

Figure 1 shows that 7 (12.7%) and 17 (30.9%) of the respondents strongly disagreed and disagreed respectively that they would rather listen to a lecturer than read the material from a computer screen. Three (5.5%) of the respondents were indecisive, 20 (36.4%) agreed and 8 (14.5%) strongly agreed that they would rather listen to a lecturer than read the material from a computer screen. Most of the respondents concluded that they would rather listen to a lecturer than read the material from a computer screen. This conclusion does not support the findings of Watkins and Leigh (2004), who concluded that most students prefer to learn from their computer screen than listening only from their lecturers.

Attempts were further made to find out from the respondents on their usage of discussion boards in assisting them in their studies and the details are provided in Table 8.

Table 8: Students Responses on the Use of ELearning Discussion Board

Responses	Frequency	Percentage
Strongly disagree	17	30.9
Disagree	24	43.6
Indecisive	4	7.3
Agree	6	10.9
Strongly agree	4	7.3
Total	55	100

Source: Field survey, 2015.

The data in Table 8 reveals that 17 (30.9%) of the respondents strongly disagreed that they often use eLearning discussion board to assist in their learning, 24 (43.6%) disagreed with the statement, 4 (7.3%) were indecisive, 6 (10.9%) agreed that they often use eLearning discussion boards to assist their learning and 4 (7.3%) strongly agreed that they often use eLearning discussion board to assist their learning. From the above, it can be deduced that majority of the respondents do not use eLearning discussion boards to assist in their learning.

Research Question 3: What are the Barriers or Factors Hindering the Integration of eLearning in the UCC CoDE Programme?

In trying to answer this question, respondents were asked what was preventing them from using eLearning during their studies. Their responses are presented in Table 9.

Table 9: Students Responses on Factors Hindering their use of eLearning

Responses	Frequency	Percentage
Lack of confidence	2	3.9
Computer equipment is unreliable	4	7.8
Not sure how useful computers are	1	2.0
No support if something goes wrong with computer	28	54.9
Equipment available to me for eLearning is unreliable	16	31.4
Total	51	100

Source: Field survey, 2015.

It can be seen from Table 10 that 2 (3.9%) and 4 (7.8%) responses each respectively went in favour of lack of confidence about computers and because computer equipment is unreliable reasons are preventing them from using eLearning. One (2.0%) and 28 (54.9%) of the response also went in favour of not sure how useful computers are and having no support if something goes wrong with their computer as a major factor restraining them from using eLearning. The remaining responses 16 (31.4%) attributed it to unreliability of equipment available. Findings from related works indicate that different factors contribute to successful eLearning in an institution (Johnson & Maddux, 2006).

Recommendations

1. eLearning readiness assessment and training for students should be administered earlier prior to their enrolment into the program.
2. Strategies should be in place to support students whose preference is predominantly on face-to-face learning. This may include the use of assessment tasks that are designed to encourage active participation through such existing tool as the discussion board.
3. College of Distance Education should create an atmosphere that will encourage and facilitate collaborative learning which is central to the success of eLearning.
4. A range of intensive workshops could be offered to students who have little interest in eLearning. These workshops should mainly focus on how to use eLearning tools as well as strategies for eLearning success. ELearning resource toolkits based on such strategies should also be developed and made available for ready referencing.
5. Training should be organized for course conveners on how to effectively design and deliver eLearning courses. This is particularly important as pedagogical soundness is fundamental to effective eLearning.

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