

**Stakeholders' Perception of Access to and Credibility of
Information and Communication Technology (ICT)
Integration into Distance Learning in Nigeria**

Yusuf, Mudasiru Olalere

*Professor of Educational Technology
Department of Educational Technology,
University of Ilorin, Ilorin Nigeria
Phone: +2348033950774
E-mail: moyusuf@unilorin.edu.ng*

&

Falade, Ayotunde Atanda (Ph. D)

*Department of Educational Technology
University of Ilorin, Ilorin, Nigeria Phone: +2348038566249
E-mail: falade.aa@unilorin.edu.ng*

Abstract

Information and Communication Technologies (ICT) have transformed distance learning by expanding and widening its access to education, improving quality, reducing the cost and establishing its credibility. This is, however, observed that not many nations, especially in the developing world, have accepted this technological innovation. The study investigated stakeholders' perception of access to and credibility of ICT integration into distance learning in Nigeria. The research was descriptive in nature, using the survey method. The sample was drawn from one single and four dual mode universities. Respondent were 897 open and distance learning stakeholders, 366 were males and 531 were females, 195 from single mode and 670 from dual mode institutions and 32 were categorized as others. Two research questions and four research hypothesis were formulated for the study. One-way Analysis of Variance (ANOVA) was used to analyze the

data. Scheffe's post hoc analysis was also used to further analyze test. It is therefore found out that there was a significant difference among the stakeholders in their perception of access to ICT in distance learning. There was also a significant difference among the stakeholders on their credibility of ICT integration for distance learning. It is therefore recommended among others that distance learning programme should be designed to accommodate the integration and utilization of ICT facilities, distance learning stakeholders should imbibe high positive attitudes and competencies in the utilization of ICT facilities.

Key Words: Stakeholders, Perception, Access, Credibility, ICT, Integration, and Distance learning.

Introduction

Integrating Information and Communication Technology (ICT) in teaching and learning is becoming profound on educational system and reforms. Information and Communication Technology (ICT) is seen as an indispensable tool to fully participate in the knowledge society for all learners and at all levels (Leah, 2005). Edozie, Olibie and Aghu (2010) observe ICT as electronic technologies used for information storage and retrieval that help students to become discovery learners by exposing them to ICT application and tools on their own which makes them become self-reliant and confident. ICTS helps in providing alternative possibilities to education (Casals, 2007) Oye, Shallasuku and Lahad (2012) refer to ICT as a reform of technology that are used to transmit, store, create, share or exchange information. They have the potential of being able to meet the learning needs of individuals, promotes educational opportunities, offer high quality learning materials and improve teacher's professional development (Abolale & Yusuf, 2005). Several studies such as Lynch (2007), Hismanoglu (2012) and Valntine (2013) established the instructional values ICT in virtually every school subjects and found to be relevant in problem solving, facilitating and enhancing teaching and learning processes in distance learning. There has also been a groundswell of interest on how ICT and interment facilities can best be harnessed to improve the efficiency and effectiveness of distance learning at all levels.

Distance learning emerges from the need to extend learning opportunities as various levels to people who do not have access to conventional modes for various reasons such as time and financial restrictions, challenges related to job and family responsibilities, distance from conventional institutional centers or other related admission challenges; in terms of limited admission spaces in Nigerian universities. Hismanoglu (2012) reported that ICTs had been promoted as platform for providing learner with opportunities for learning in any field. They have the potential of making distance learning accessible anytime and anywhere.

Perception is a cognitive process in which information processing is used to transfer information into the mind where it is related to other information (Alva, 2006). It is also assumed that perception is entirely due to data transfer and information processing an argument that can be avoided by proposing that the percept does not depend wholly upon the transfer and arrangement of data.

The growth of distance learning has been associated with ICT, although the choice of technology to use depends on variety of factors including desirability, feasibility and sustainability of such technology (Aguti & Fraser, 2006). General studies on ICT integration in distance learning has been disparate and to specific then to a particular sector. Such studies include Atar, Azli, Rahman and Idrns (2002) who did a review on gender difference in perceived computer competencies in distance learning. Ahmad and Abdullah (2002) review the antecedents of ICT attitudes to learners of distance education Gay, Mahon Devonish and Alleyne (2006) reviewed perceptions of ICT among distance learning students in Barbados.

Other was McLachlan, Craig and Coldwell (2010) whose review was on gender analysis or students perceptions of ICT. Longe, Boatens, Longe and Olatubosun (2011) also a review on an assessment of usage-phobia factors of ICT adoption among adults in south-western Nigeria. No single study, (known to the researchers) has addressed stakeholders' perception of access to and credibility of ICT integration in distance learning in Nigeria. The stakeholders in distance learning include lecturers, administrators, facilitators and other support staff. The relevance and

promises of ICT integration in distance learning such as credibility and access were explored to fill the gap noted in previous studies.

Purpose of the Study

The main purpose of this study was to investigate stakeholders' perception of ICT integration in distance learning in Nigeria. The researchers specifically investigated from three perspectives

- 1 perception of ICT integration into distance learning in Nigeria
- 2 perceived access to ICT in distance learning in Nigeria.
- 3 perceived credibility of ICT integration into distance learning in Nigeria.

Research Questions

In this study, the following research questions were raised;

- 1 What is the stakeholders' perception of access to ICT for distance learning in Nigeria?
- 2 What is the perception of stakeholders on the credibility of ICT integration into distance learning in Nigeria?

Research Hypotheses

The following null hypotheses were formulated to address the three research questions raised for the study.

- H₀₁: There is no significance difference among the categories of stakeholders, on their perception of access to ICT for distance learning in Nigeria.
- H₀₂: There is no significant difference among the categories of stakeholders on the credibility of ICT integration for distance learning in Nigeria.
- H₀₃: There is no significant difference between male and female stakeholders, within the categories, on their perceived access to ICT for distance learning in Nigeria.
- H₀₄: There is no significant difference between male and female stakeholders, within the categories, on their credibility of ICT integration into distance learning in Nigeria.

Methodology

The study is a descriptive research type utilizing survey method. The study therefore used a researchers' designed questionnaire which enabled the researchers to collect data from a very large population. This comprised lecturers, facilitators, distance learners, administrators, support staff such as course tutors, course-writers, and center co-coordinators from University of Abuja Centre for Distance Learning and Continuing Education, Distance Learning Institutions of the Universities of Ibadan, Lagos, Obafemi Awolowo and National Open University of Nigeria (NOUN), Lagos which were approximated to be 155,000

The chosen institutions were purposively chosen covering both the single mode and dual mode distance learning institutions in Nigeria. A total of 250 copies of the questionnaires were administered to each of the five distance learning institutions used for the study totaling 1250. The researchers' designed questionnaires have two major sections. Out of 1250 questionnaire distributed, 908 were responded to and only 897 were found to be valid. Test-retest was used for the reliability of the instrument using Pearson product moment correlation coefficient formula 0.7 as its value. The analysis and interpretation of data obtained was analyzed by using percentage, mean, and inferential statistics, that is, One-Way Analysis of variance (ANOVA), t- Test and Scheffe's post hoc analysis at the level of significance of 0.05.

Results and Discussion of Findings

The following were the results obtained based on research questions and hypotheses raised for the study;

Research Question 1:

What is the stakeholders' perception on access to ICT for distance learning in Nigeria?

The research question aimed at examining the views or opinion of stakeholders on their access to ICT for distance learning.

Table I: Stakeholders' Perception on Access to ICT in Distance Learning in Nigeria.

S/N	Access to the Use of ICT for Distance Learning	SA		AG		DS		SD		Mean
		N	%	N	%	N	%	N	%	
1	Factors such as cost, age, higher academic qualification, and tribe or religion differences are not necessarily a hindrance to access to ICT facilities	425	47.4%	320	35.7%	87	9.7%	65	7.2%	3.23
2	I have access to use ICT in my office/ study centre/ classroom	369	41.1%	316	35.2%	132	14.7%	80	8.9%	3.09
3	Cost of provision and maintenance of ICT facilities make it inaccessible to its users	286	31.9%	398	44.4%	154	17.2%	59	6.6%	3.02
4	Inabilities of some ICT materials to withstand prolonged climate/ temperature of some places other than countries where they made from pose serious threat to its unhindered accessibility.	292	32.6%	397	44.3%	142	15.8%	66	7.4%	3.02
5	I have a modem which can enhance my access to ICT resources anywhere and anytime	322	35.9%	331	36.9%	165	18.4%	79	8.8%	3.00
6	Internet (ICT) facilities with sufficient bandwidth and coverage are readily available	296	33.0%	352	39.2%	167	18.6%	82	9.1%	2.96
7	power supply or its alternative is readily ence making ICT accessible	306	34.1%	320	35.7%	159	17.7%	112	12.5%	2.91
8	Fear (phobia) of using technology (of any kind) can make ICT inaccessible	240	26.8%	368	41.0%	209	23.3%	80	8.9%	2.86
9	Low diffusion of ICT usage makes accessibility difficult	243	27.1%	369	41.1%	180	20.1%	105	11.7%	2.84
10	The likely hazards from using ICT can make it inaccessible to its users	222	24.7%	373	41.6%	224	25.0%	78	8.7%	2.82

It is observed from Table I that majority of respondents have high rate of perception on access to ICT for distance learning in Nigeria. This was indicated by their percentage scores which were found to be on high side.

Furthermore, questionnaire items on factors such as cost, age, tribe among others were found not necessarily hindering access to ICT facilities having a mean score of 3.23 which was noted to be ranked highest followed by access to ICT in office, study centers or class, with a mean of 3.09; inaccessibility due to cost of provision and maintenance of ICT materials to withstand Nigeria's climate, having a mean of 3.02. Also, possession of modem, with a mean of 3.00; a sufficient band with for quick access, with a mean of 2.96; and availability of hydroelectricity or its alternative, having a mean of 2.91. Other items in Table I are techno-phobia, with a mean of 2.86; low diffusion of ICT with a mean of 2.84 and likely hazards from using ICT had a mean score of 2.82.

Using 2.5 as the bench mark which is a little higher than the mean value of 4, it can therefore be inferred that the respondents generally perceived positive access to ICT in distance learning in Nigeria.

Research Question 2

What is the perception of stakeholders on their credibility of ICT integration in distance learning in Nigeria?

The question aimed at determining how authentic is the use of ICT for distance learning in Nigeria.

Table 2: Stakeholders' Perception on their Credibility of ICT Integration in Distance Learning in Nigeria.

S/N	Credibility of ICT in Distance Learning	SA		AG		DS		SD		Mean
		N	%	N	%	N	%	N	%	
1.	The contemporary/global trend is the use of ICT in all sectors; hence distance learning should not be left out.	421	46.9	370	41.2	58	6.5	48	5	3.30
2	ICT is noted to provide immediate feedback; this makes it credible	424	47.3	340	37.9	81	9.0	52	5.8	3.27
3	ICT integration in distance learning is observed to gain national and international acceptability	411	45.8	362	40.4	75	8.4	49	5.5	3.27
4	Stakeholders' interest, attitudes, motivation and competence are observed to increase when ICT is used for distance learning activities.	390	43.5	400	44.6	55	6.1	52	5.8	3.26
5	The fact that distance learning programme itself has existed for century suggests its worthiness and credibility	370	41.2	404	45.0	80	8.9	43	4.8	3.23
6	Promptness and readiness qualities of ICT when it is to be used make it to be credible	367	40.9	405	45.2	78	8.7	47	5.2	3.22
7	Using ICT for distance learning has been found to be reliable and dependable	374	41.7	392	43.7	83	9.3	48	5.4	3.22
8	The use of ICT in distance learning is not just a sudden attempt; it has gone through historical/conceptual development. This makes it credible	346	38.6	424	47.3	88	9.8	39	4.3	3.20
9	Using ICT for delivery of instruction in distance learning reduces examination malpractices, academic fraud and other irregularities	370	41.2	349	38.9	107	11.9	71	7.9	3.13
10	Absence of social challenges such as industrial strike adds credit to the use of ICT in distance learning	325	36.2	370	41.2	134	14.9	68	7.6	3.06

The ranking of the perception of stakeholders on credibility of ICT integration in distance learning in Nigeria is as follows:-

The global trend of using ICT in distance learning was ranked highest with a mean score of 3.30. Other were ICT for immediate feedback with a mean score of 3.27; to gain national or international reputation with a mean score of 3.27; increasing stakeholders' interest, competence, and so on (mean=3.26); the existence of distance learning over a century (mean=3.23).

In addition, promptness and readiness qualities of ICT attracted a mean score of 3.22, followed by ICT's reliability and dependability with a mean score of 3.22; development of ICT in distance learning having a mean score of 3.20; reduction in examination irregularity via ICT attracted a mean score of 3.13; and absence of social challenges has a mean of 3.06. Similarly, stakeholders' responses were in favour of credibility of ICT integration in distance learning in Nigeria. This was established by the percentage of the respondent which way on high side. In view of the above, stakeholders have favourably responded on the credibility of ICT integration in distance learning in Nigeria

Based on the mean value of 2.5 as the bench mark, it can be inferred that the respondents generally perceived positively on the credibility of ICT integration in Distance learning in Nigeria.

Hypothesis One

H_{0_1} : *There is no significance differences among the categories of stakeholders on their perception of access to ICT for distance learning in Nigeria.*

In testing the null hypothesis, Analysis of variance (ANOVA) was used. Schaffer's post hoc analysis was also used to establish the results.

Table 3: The ANOVA Results of Stakeholders' Perception of Access to ICT for Distance Learning

	Sum of Squares	df	Mean Squares	F	Sig
Between Group	61550.07	7	8792.87	834.09	.000
Within groups	9371.68	889	10.54		
Total		70921.76	896		

Table 3 indicates the ANOVA result that there was a significant difference among the categories of stakeholders on their perception of access to ICT for distance learning in Nigeria [$F(7,889) = 834.09, P = .000$]. This is however contrary to the stated null hypothesis, thus the null hypothesis was rejected since p is found to be less than .05. Furthermore, Scheffe's post hoc analysis was also to determine the significant among the categories of stakeholders.

Table 4: Scheffes' Multiple Comparison on Perception of Access to ICT for Distance Learning.

Dependent (I) Variable	(J) Categories Stakeholders	(I-J) Mean Difference	Std Error	Sig
Access to the Lecturer Use of ICT	Facilitators	0.21	0.48	1.000
	Administrators	5.32	0.38	0.000
	Distance Learners	13.25	0.03	0.000
	Coordinators	25.81	0.56	0.000
	Course Tutors	30.00	1.35	0.000
	Course Writers	30.00	1.64	0.000
	Student Support	30.00	0.56	0.000

It could be deduced from Table 4 that there was a significant difference between lecturers and all other categories stakeholders on the access to the use of ICT in distance in Nigeria; whereas there is no significant difference between lecturers and facilitators on their perception of the access to the use ICT in distance learning in Nigeria.

Hypothesis Two:

H_0 , There is no significant difference among the categories of stakeholders on the credibility of ICT integration for distance learning in Nigeria.

In attempt to test the stated null hypothesis, Analysis of Variance (ANOVA) was used. Scheffe's post hoc analysis was also used to establish its results.

Table 5: The ANOVA on Stakeholders on the Credibility of ICT Integration for Distance Learning in Nigeria.

	Sum of Square	Mean Square	df F	Sig
Between group	55358.33	7	7908.33	1790.97 .00
Within groups	3925.54	889	4.42	
Total	9283.87	896		

Table 5 indicates a significant difference among a categories of stakeholders on the credibility of ICT integration into distance learning in Nigeria [$F(7,889) = 1790.97, p = .000$]. This means that the stated null hypothesis was therefore found to be rejected. In view of this, Scheffe's post hoc test was also used to determine difference among the categories of stakeholders.

Table 6: Scheffe's Multiple Comparison on Stakeholders Perception on the Credibility of ICT Integration into Distance Learning in Nigeria.

Dependent (I) Variable	(J) Categories Stakeholders	(I-J) Mean Difference	Std Error	Sig
Credibility of ICT	Facilitators			
	Lecturers	0.00	0.31	1.000
	Administrators	0.42	0.32	0.980
	Distance Learners	10.44	0.28	0.000
	Coordinators	20.93	0.42	0.000
	Course Tutors	26.00	0.89	0.000
	Course Writers	28.50	1.08	0.000
Student Supports	29.95	0.42	0.000	

It could be inferred from Table 6 that there were significant difference among facilitators and all other categories of stakeholders. However, there is no significant difference between facilitators, lecturers' and administrators' perception on the credibility of ICT integration into distance learning in Nigeria.

Hypothesis Three

H₀₃: There is no significant difference between male and female stakeholders' within the categories, on their perceived access to ICT for distance learning in Nigeria.

In an attempt to determine significant difference between male and female stakeholders' perceived access to ICT for distance learning in Nigeria, t-test was used for the null hypothesis.

Table 7: t-test of Male and Female Stakeholders on their Perceived Access to ICT for Distance Learning in Nigeria

Gender	N	Mean	SD	df	t-cal	t-crit	p
Male	366	38.03	2.93	895	0.497	1.96	0.181
Female	531	24.11	6.97				
Total	897						

Table 7 indicates that $t(895) = 0.497$, $p = 0.181$, $d = 13.92$. This implies that the calculated t-value of 0.497 was not significant as the significant value of 0.181 was greater than 0.05 alpha levels. Therefore, there was no significant difference between male and female stakeholders' perceived access to ICT for distance learning in Nigeria. The hypothesis that 'there is no significant difference between male and female stakeholders on their perceived access to ICT for distance learning in Nigeria is hereby found to be accepted..

Hypothesis Four

H₀₄: There is no significant difference between male and female stakeholders within their categories on their perception on the credibility of ICT integration in distance learning in Nigeria.

In determining the significant between male and female stakeholders' perceived credibility of ICT for distance learning in Nigeria, t-test analysis was used to test the stated null hypothesis

Table 8 indicates that $t(895) = 37.92$, $p = 0.000$, $d = 12.98$. This shows that the calculated t-value of 37.92 was significant because the significant value of 0.000 was less than 0.05 alpha Level. This implies that there was significant difference between male and female stakeholders' perceived credibility of ICT for distance in Nigeria with male (39.83) having a more positive perception than female (26.85). The null hypothesis which states that "there is no significant difference between male and female stakeholders' perceived credibility of ICT distance learning in Nigeria" is therefore rejected.

Discussion of Findings

It could be inferred from the study that the respondents generally perceived positively of access to ICT in distance learning with the means values between 2.82 and 3.23 for lowest and highest ranking respectively. Furthermore, it was revealed that there was significant difference among the categories of stakeholders on their perception of access to ICT for distance learning in Nigeria. The post-hoc analysis also revealed that there was a strong significant difference between either course tutor, course writer or student support service and facilitators or lecturers in their perception of access to ICT in distance learning. This could be expressed as the level at which ICT users can gain contact with the use of ICT facilities without any appreciable hindrance. In the past, distance learning teachers are mostly separated by physical distance and time; however, the contemporary distance learning enjoys the dividend of ICT to break such barriers. This is in line with the position of Ogar (2004). Tomei (2005) posited that integration of accessible technology such as ICT would promote meaning learning and enhance professional productivity.

Furthermore, Gulbahar (2008) recognized that technology generally and ICT in particular had developed tremendously; change the way we live, learn, as well as the demands of the society. This could not have been possible supposing ICT is known for inaccessibility. This means ability to access ICT materials with little or no training aids its positioning and integration. Also Pallof and Pratt (2010) agreed that ICT could be accessed because they believed that technology itself could not teach

unless such technology (such as ICT) could be accessed by both the student and teacher. Favourable attitude to the use of technology (ICT) can also enhance its accessibility. This was as enunciated by Valentine (2013).

However, these was of no significance among course tutors, course writers and student support services, also between facilitators and lecturers in their perception of access to ICT in distance learning in Nigeria. The perception of the stakeholders on the credibility of using ICT for distance learning the result of the related research question for the study revealed that the highest and lowest mean values were 3.06 and 3.20. Using 2.5 as benchmark, it can be deduced that the respondents generally perceived positively the credibility of ICT in distance learning in Nigeria.

More so, the stated hypothesis was observed to establish that there was significant difference among the categories of the stakeholders on the credibility of ICT integration into distance learning due to its hypothesis being rejected. The post head analysis also inferred that there was a strong significance difference between student support service and either of administrators, lecturers or facilitators on the credibility of ICT integration into distance learning in Nigeria. Credibility of ICT integration for distance learning appears difficult to pin down because it can mean different thing to different stakeholders. Credibility of ICT integration in distance learning, in its form should cover all aspects of ICT based distance learning programme. This was supported by Mcillroy and Walker (1996). Credibility of ICT integration for distance learning should cover essential area such as appreciating the worth or value of ICT with dignity, confidence and quality of the process and products of ICT-based distance learning in Nigeria.

UNESCO (2002) posited that activities of ICT-based distance learning do not function in isolation but essential parts of an operation or activity are dependent on one and another. For instance, If ICT based instructional materials are of excellent quality; such seems to lack credibility and relevance if they could not reach the learner when needed as the whole programme of activity would fail. This could be due to lack of internet connectivity especially in a developing nation like Nigeria. Credibility is a

product of determination, planning, monitoring, control and co-ordination (McIlroy&Walker, 1996).

It is therefore important that credibility of ICT be built into an ICT-based distance learning at the time of design and not at the end. However, there was no significant difference between student support services and course writers; as well as among administrators, lecturers and facilitators on the credibility of ICT integration into distance learning in Nigeria.

Results from the study also showed that the mean values range between 2.82 and 3.23; lowest and highest respectively. This means that the respondents positively perceived their access to ICT in distance learning in Nigeria. This is supported by the related hypothesis which revealed that there was no significant difference between male and female stakeholders' perceived access to ICT for distance learning in Nigeria.

Lynch (2007) agreed with this finding when he stressed that both genders were in agreement concerning perceived access to ICT in distance learning. Hashim, Ahmad and Abdullah (2010) were also in line with the finding when they reported from their study on gender and attitudes toward ICT for distance learner that there were no significant differences between genders. This means there is no discrimination between male and female on their perceived access to ICT in distance learning. This becomes necessary as bulk of teaching and learning processes are done via ICT, distance learning stakeholders therefore have no choice than to embrace it. This will ensure that they are at par with their fellow students in distance learning. However, McLachan, tend to gain access to ICT to a greater extent than their female counterparts. Craig and Coldwell (2010) had earlier expressed a contrary in favour of male. This suggests that male is more comfortable and competent with technology than female. They further reported that gender difference in gaining access to ICT occur at a young age due to different attitudes to technology and that female tend to underestimate their abilities while male overestimate theirs, resulting in female having less self-confidence and lower interest in technological drives than male. Successes in ICT come with usage, time spent and accessibility to such ICT facilities.

The result showed that there was significant difference between male and female stakeholders' perceived credibility of ICT for distance

learning in Nigeria with male (39.83) having a more positive perception than female (26.85). It has been widely accepted that ICT-based distance learning has the potential to contribute to the enhancement of stakeholders' development by bringing education to their home and other citizen. This was in support of UNESCO (2002) who posited that the distance learning must reach the learners when needed and that their teaching content should be ICT-based. Credibility is a product of confidence, planning, determination and control (Mcillroy & Walker, 1996). Credible ICT-based distance learning enables women to enter into the mainstream of education as well as gaining recognition locally and internationally (Atan, Azli, Rahman & Idrus, 2002).

Conclusion

This research explores the stakeholders' perceptions on the access and credibility of the integration of ICT into distance learning in Nigeria.

In general, the overarching trend is that the percentage of girls and women in science and technology decreases steadily; this is in line with another finding from this study that there was a significant difference among the stakeholders on their perception of access to ICT for distance learning. There was a significant difference among the stakeholders on the credibility of ICT integration for distance learning. There was no significant difference between male and female stakeholders on their perceive access to ICT in distance learning. Though, other studies revealed that social class is a factor of women's access to ICT and technical education. Women in higher social classes are more likely to have financial strength to acquire such ICT facilities.

Finally, there was a significant difference between male and female stakeholders in the credibility of ICT integration in distance learning, with males again, having a more positive perception than their females counterparts. Significant difference established in the study had served as an eye opener that discrimination of all sorts should be eliminated in distance learning institutions; women and girls should also be free from all forms of intimidation; masculine image of science, technology and ICT should be reduced, more attention be given to girls mathematic and sciences. The imbalance between the enrolment of girls and boys

now becomes a global concern. The technology focus should generally be widened. ICT-based distance learning provides a great opportunity for women and girls, the flexibility of access and study times. It is hoped that the stakeholders' perception of the integration of ICT into distance learning would give them access to learning any time, any place, and allow the stakeholders to give them necessary support.

Recommendations

Based on the findings and conclusions of this study, the following recommendations were made:

- (1) The integration of ICT into distance learning should expose all categories of Stakeholders to digital based instructional and administrative strategies to promote widest access to knowledge acquisition, discovery and learning at various levels of interactions such as student-students, student-tutor and tutor-tutor.
- (2) Distance Learning Program should be designed to accommodate the integration and utilization of ICT facilities. This will be useful to all categories of distance learning stakeholders.
- (3) Distance learning stakeholders should help themselves by exhibiting high positive attitudes and competencies in the utilization of these ICT facilities needed and available. ICT facilities are almost useless if unused. Regular usage of may facility is a proof of its accessibility and credibility.
- (4) Researchers on distance learning develop keen interest in the area. Such researches, if empirically based, would go a long way to further establish the credibility and accessibility of ICT. This would also contribute to the existing knowledge.

References

- Abolade, A.O & Yusuf, M.O. (2005). Information and Communication Technology and the Nigerian Teacher Education Programme. *African Journal of Education Studies* 3 (1) 1-19.
- Aguti, J.N. & Fraser, W.J. (2006). Integration of Information Communication Technologies (ICTs) in the Distance Education Bachelor of Education Programme, Makerere University,

- Uganda. *Turkish Online Journal of Distance Education to JDE July*, ISSN 1302-6488 7 (3) 36-45.
- Alva, N. (2006). Perception in Sahotrasarkar and Jessica Pfeifer (Eds). *The Philosophy of Science. An Encyclopedia*, New York: Routledge pp. 545-550.
- Atan, H; Azli, N.A; Rahman, Z.A. & Idrus, R.M. (2002). Computers in Distance Education: Gender differences in self-perceived computer competences. *Journal of Educational Media*, 27 (3), 34-35.
- Gay, G; Mahon, S; Devenish, D. & Alleyne, P. (2006). Perceptions of information and communication technology among undergraduate management students in Barbados, *International Journal of Education and Development using ICT and Communication Technology (IJED ICT)* 2 (4) 6-17.
- Gulbahar, Y. (2008). ICT Usage in Higher Education: A case study on pre-service Teachers and instructions. *The Turkish Online Journal of Educational Technology TOTET January ISSN: 1303-6521*
- Hashim, R, Ahmed, H, & Abdulah, Z. (zolo). Antecedens of ICT attitudes of distance education students TOTET: *The Turkish Online Journal of Educational Technology*, 9(1) 28-36.
- Hismanoglu, M. (2012). Prospective EFL Teachers' perceptions of ICT interpretation: A study of distance higher education in Turkey. *Educational Technology & society*, 15 (1), 185-186,
- Longe, O; Boateng, R; Longe, F; & Olatubosun, K. (2010). Information and Communication Technology Adoption among adults in south western Nigeria: An assessment of usase-phobia factors. *Journal of Information Technology Impact*, 10 (1) 55-68.
- Lynch, J. (2007). Exploring the gender and IT problem and possible ways forward In *Gender and I.T. Ongoing challenges for computing and Information Teleology education in Australian Secondary Schools*. Lynch, J. (ed) 1-26. Altona, Common Ground Publishing.
- Mcllruy, A. & Walker, R. (1996). *Total Quality management. Policy and Implications for Distance Learning in Open Education*. Routledge, London.
- Mclachlam, C, Craig, A & Coldwell, J. (2010). *Students perceptions of ICT: At student perceptions of ICT: A gendered Analysis*. A

- proceeding at the 12th Australian Computing Education Conference (ACE 2010), Brisbane, Australia (January)
- Ogar, A. (2004). Psychological Evaluation by means of an online computer Behavioural research method and Instruction, 13
- Pallof, R. & Pratt, K. (2010) making the transition: helping teachers to teach online. Retrieved on 15th December 2011 from <http://www.pallop.org.edu>.
- Tomeil, L. A. (2005). Taxonomy for the technology Domain. USA information science publishing
- Tseloins, N; Daskalakis, S. & Papadopoulou, M. (2011). Assessing of a blended learning university course *Educational, Technology and Society*, 4 (3), 224-235
- Valentine, D. (2013). Distance learning. trends, policy and strategic considerations, Paris France.