

Enhancing the Utilization of Information Communication Technology (ICT) among Home Economics Lecturers in South Eastern Nigeria

Ejinkeonye Uju Bridget
Department of Home Economics/Hospitality Management and Tourism
College of Applied Food Science and Tourism
Michael Okpara University of Agriculture, Umudike, Abia State

Usoroh, Comfort I
Department of vocational Education, Faculty of Education, University of Uyo, Uyo

Abstract

The study was on enhancing the utilization of information communication Technology (ICT) among Home Economics lecturers in south Eastern Nigeria. The study adopted a survey method. The area of the study is south eastern Nigeria. Three research questions guided the study. The population was made up of 63 Home Economics lecturers from the six colleges of education that offer Home Economics in the area of the study. There was no sampling. Questionnaire was used for data collection. Data were analyzed using means and standard deviation. The findings include that there were low extent utilization of ICT in lesson preparation and presentation. The finding also reveals 10 challenges of ICT utilization and 15 measures for enhancing ICT utilization. It was recommended that workshops, conferences, seminars, in-service training and improvement programs should be organized by schools to train lecturers on ICT utilization among others.

Keywords: ICT, Home Economics, Lecturers, Nigeria.

1. Introduction

During the past decade there has been an exponential growth in the use of information and communication technology (ICT) which has made pervasive impacts both on the society and on everyday living. Information and communication technology (ICT) are means of accessing, receiving, storing, transferring, processing and sending ideas, perception and information through computer and telecommunication facilities (Keziah, 2004). ICT is all kinds of electronic systems that are used for broadcasting, telecommunications and all forms of computer mediated communication (Akudolu, 2003). ICT has compressed the world into a global village and thus repositioning the social, economic, political and academic outlook of man (Chiwe, 2005). There is increasing people's interest, attention and investment being put into the use of ICT in education all over the world. ICT is globally common and has tremendously influenced development of all facets of human endeavor. The utilization of ICT in facilitating knowledge acquisition and dissemination within and between various disciplines had been such that human input is reduced to the barest minimum and at a supersonic speed. According to Johnson (2003), in the present age, ICT has shifted emphasis from worksheets to computers and from textbooks to internet. The use of on-line lecture notes are replacing and adding quality to traditional teaching and learning tasks in every area of study, including Home Economics (Idongesit and Ekpo, 2008).

Home economics is a field of study primarily concerned with strengthening family life through educating the individual for family living, improving the goods and services used by families, conducting researches to discover changing needs of the individual family member to maximize their own and society's productivity and help people adjust to changes and shape their future (Anyakoha, 2013). The philosophy of Home Economics borders on improvement of quality of life of the individual, family and society at large. This demands that Home Economics teachers should have a good information and knowledge about the new trends and changes around which is ICT in order to help in achieving the primary concern of the subject: Home economics is a skill oriented subject and the effective implementation of this subject must take cognizance of ICT and expose students to extensive practical experiences with the help of ICT instructional materials like electronic boards, radio, the radio cassette, television, film, strip projector, the slide projector, the cinema, projected programmed instructions and the computers. All these will help in the psychomotor, cognitive and affective developmental opportunities of the studies. Home Economists in developing countries to the use of information technology (Anyakoha, 2001). Many Home Economics teachers are aware that with ICT, information is easily accessible, learning becomes exciting and interesting and it enables Home Economics student to acquire necessary concepts with ease (Achebe, 2012). Despite the lecturers' awareness of some of the benefits of ICT in teaching Home Economics, many tertiary institutions are not utilizing ICT gadgets in teaching. Therefore the need for this study, to find out how to enhance the utilization of information communication technology (ICT) among Home Economics lecturers in South Eastern Nigeria.

1.1. Purpose of the Study

The major purpose of this study was to find out how to enhance the utilization of information communication technology (ICT) among Home Economics lecturers in South Eastern Nigeria Specifically, the study determined:

1. The extent of ICT tool utilization for effective teaching and learning of Home Economics.
2. Challenges of ICT utilization among Home Economics lecturers in South Eastern Nigeria.
3. Measures for enhancing ICT utilization among Home Economics lecturers in South Eastern Nigeria.

2. Methodology

The study adopted a survey method. The area of the study was south Eastern Nigeria. Population for this study comprised all the Home Economic lecturers in Colleges of Education in South Eastern Nigeria. At the time of the study there were 63 Home Economics lecturers from the six Colleges of education that offer Home Economics in the area of study. These are made up of six lecturers in CE (T) Arochukwu, 14 Home Economics lecturers in NOCE Nsugbe, 14 Home Economics lecturers in FCE (T) Umunze, five Home Economics lecturers in ESCE (T) Enugu, 10 Home Economics lecturers in CE Ehu-Amufu and 14 Home Economic lecturers in AICE Owerri.

The entire population of the Home Economics lecturer was used because their population can be managed, so there was no sampling. Questionnaire was used for data collection. It was developed based on the specific purposes. It was face validated by three Home Economics lecturers in Michael Okpara University of Agriculture Umudike, Abia State. The instrument was administered to the 63 lecturer by hand the researcher. Out of the 63 questionnaire distributed, 60 were retrieved. The research questions were analyzed using means and standard deviation. Items scoring 2.50 and above were accepted as agree while items scoring below 2.50 were regarded as disagree.

3. Results

Table 1: Mean Scores of Responses of Home Economics Lecturers on the extent of ICT tools utilization for effective teaching and learning of Home Economics

S/N	Extent of ICT utilization for effective teaching and learning of Home Economics	\bar{X}_1	\bar{X}_2	\bar{X}_3	\bar{X}_G	SD	Remark
1	Use of Computer in typing questions	3.50	3.57	4.00	3.63	0.67	HEU
2	Use of computer in giving notes	2.00	1.83	3.00	2.03	1.03	LEU
3	Browsing the internet for information	3.50	3.35	4.00	3.47	0.57	HEU
4	Online assignment	2.00	1.39	1.40	1.43	1.91	LEU
5	Tele conferencing	1.00	2.00	2.00	1.93	1.41	LEU
6	Soft copy notes	1.00	1.48	2.20	1.57	1.57	LEU
7	Use of Skype	1.00	1.57	1.40	1.50	0.94	LEU
8	Use of power point presentation	2.50	2.35	3.400	2.53	0.94	HEU
9	Ms Excel in result computation	2.00	2.39	3.00	2.47	1.25	LEU
10	Use of DVD player recorder	1.00	1.78	2.40	1.83	0.94	LEU
11	Use of interactive white board	3.50	2.65	2.80	2.73	1.11	HEU
12	Use of Television set	1.00	1.65	1.80	1.63	1.07	LEU
13	Use of public address system	3.00	2.53	2.80	2.60	0.89	HEU
14	Use of projector	2.50	2.22	3.40	2.43	0.89	LEU
15	Use of ICT in lesson preparation and presentation	1.00	2.26	3.00	2.30	1.02	LEU

Key: \bar{X}_1 = mean of Home Economics Lecturers with B.sc, \bar{X}_2 = mean of Home Economics Lecturers with M.sc /MEd, \bar{X}_3 = mean of Home Economics Lecturers with Ph.D, \bar{X}_G = Grand mean, SD= Standard deviation. HEU=High extent utilized, LEU=Low extent utilized.

Table 1 shows that the mean responds of Home Economics lecturers on the extent of ICT tools utilization for effective teaching and learning of Home Economics. The data revealed that items 1, 3,8,11 and 13 were high extent utilized by the respondents for effective teaching and learning of Home Economics. This shows in the mean scores which ranged between 2.53-3.63. But items 2,4,5,6,7,9,10,12,14, and 15 were low extent utilized by the respondents for teaching and learning of Home Economics.

The standard deviation of items 1, 2,7,8,10,13 and 14 were less than 1.00 implying that the responses made by the respondents were close to one another and not far from the mean. The standard deviation of items 2, 4, 5, 6, 9, 11, 12 and 15 were above 1.00 implying that the responses made by the respondents were not close to one another and were far from the mean.

Table 2: Mean scores of Responses of Home Economics Lecturers on Challenges of ICT Utilization in south Eastern Nigeria.

	Challenges of ICT Utilization among Home Economic Lecturers in south Eastern Nigeria	\bar{X}_1	\bar{X}_2	\bar{X}_3	\bar{X}_4	\bar{X}_5	\bar{X}_6	\bar{X}_G	SD	Remark
1	Lecturers lack of competence in handling ICT	2.63	2.80	3.00	2.75	3.33	3.38	2.97	0.76	Agree
2	Inadequate time for training in ICT	2.75	3.00	3.00	3.00	3.33	2.50	2.83	0.75	Agree
3	Phobia for ICT and its ICT	1.75	2.20	2.00	2.25	2.67	2.38	2.17	0.79	Disagree
4	Lectures resistance to change and negative attitude towards ICT	1.75	1.80	2.00	2.00	2.33	2.37	2.03	0.85	Disagree
5	Lack of incentives and motivation for lecturers	2.63	3.40	2.00	2.50	3.00	3.00	2.83	0.91	Agree
6	Inadequate technical support for Lectures	3.25	3.40	4.00	3.00	3.00	2.88	3.17	0.83	Agree
7	Poor finding to procure ICT facilities	3.25	3.20	4.00	3.25	2.66	3.38	3.27	0.74	Agree
8	Lecturers consider themselves old to learn about ICT	1.88	2.40	2.00	1.75	2.00	2.63	2,17	0.91	Disagree
9	Lack of adequate awareness about ICT by school management	2.88	2.40	2.00	1.50	2.00	2.75	2.43	0.89	Disagree
10	Students negative attitude towards ICT	2.63	2.60	3.00	2.00	2.33	2.37	2.47	0.94	Disagree
11	High cost of ICT facilities	2.63	2.60	3.00	3.25	2.67	3.25	3.03	0.76	Agree
12	Poor maintenance of ICT facilities	3.00	3.80	3.00	3.00	2.67	2.88	3.07	0.69	Agree
13	Lack of skilled computer maintenance personal	2.50	3.20	3.00	3.25	2.67	2.87	2.87	0.77	Agree
14	Poor connectivity to internet service.	3.37	3.40	3.00	3.75	3.00	3.00	3.27	0.78	Agree

Key: \bar{X}_1 = mean of Home Economics Lecturers whose length of service is 1-5years, \bar{X}_2 = mean of Home Economics Lecturers whose length of services is 6-10years, \bar{X}_3 = mean of Home Economics Lecturers whose length of services is 11-15 years,, \bar{X}_4 = mean of Home Economics Lecturers whose length of services is 16-20 years, \bar{X}_5 = mean of Home Economics Lecturers whose length of services is 21-25 years, \bar{X}_6 = mean of Home Economics Lecturers whose length of services is 26 years and above, \bar{X}_G = Grand mean, SD= Standard deviation.

Table 2 shows the mean responses of respondents on the challenges of ICT utilization among Home Economics lecturers in south Eastern Nigeria. The data revealed that items 3,4, 8,9 and 10 disagree that the items were not among the challenges of ICT utilization among home economics lecturers. But items 1, 2,5,6,7,11,12,13 and 14 were all agreed by the respondents as challenges of ICT utilization among home economics lecturers in south Eastern Nigeria.

The standard deviation of each challenges of ICT utilization is less than 1.00, implying that the responses made by the respondents individually were close to one another and are not far from the mean.

Table 3: Mean Scores of Responses of Home Economic Lecturers on Measures for enhancing ICT Utilization in south Eastern Nigeria

S/N	Measures for enhancing ICT Utilization among Home Economic Lecturers in south Eastern Nigeria	\bar{X}_1	\bar{X}_2	\bar{X}_3	\bar{X}_4	\bar{X}_5	\bar{X}_6	\bar{X}_G	SD	Remark
1	Training home economic lecturers on ICT	4.00	3.60	4.00	3.50	3.67	3.50	3.70	0.53	Agree
2	Allotting enough time for lecturers to practice on ICT	3.75	3.60	4.00	3.25	3.33	3.38	3.53	0.51	Agree
3	Individuals and communities should organize and provide fund for the procurement of ICT facilities	2.63	2.80	2.00	2.75	2.33	2.50	2.57	0.94	Agree
4	ICT implementation in schools should be taken serious by the government	3.50	3.60	4.00	2.75	3.33	3.63	3.47	0.81	Agree
5	Power supply that enhances the use of ICT should be regular	3.13	3.80	4.00	3.75	3.67	3.63	3.57	0.68	Agree
6	Hiring ICT experts outside the school system to give informal lecture to lecturers and students	3.00	3.20	4.00	3.25	3.33	3.00	3.17	0.79	Agree
7	Government should provide more funds for ICT development in Schools	3.38	3.60	4.00	3.50	3.33	3.89	3.60	0.50	Agree
8	Establishing efficient ICT centers capable of servicing large number of students from nearby institutions	3.38	3.80	4.00	3.25	3.33	3.75	3.57	0.54	Agree
9	Involving Home Economics lecturers in planning and discussions on issues relating to use of ICT	3.38	3.40	4.00	3.50	3.67	3.75	3.57	0.57	Agree
10	Creating proper awareness on the benefits of ICT in development among lecturers	3.50	3.00	4.00	3.25	3.67	3.63	3.47	0.68	Agree
11	Affording the lecturers opportunities for in- service training on ICT	3.63	3.60	3.50	3.50	3.67	3.50	3.57	0.68	Agree
12	School management to encourage lecturers to use ICT in lesson preparation and presentation	3.63	3.60	4.00	3.50	3.33	3.75	3.63	0.49	Agree
13	Workshop to be organized for lecturers on the benefits of using ICT in their teaching activities	3.63	3.40	3.00	3.25	3.67	3.87	3.57	0.63	Agree
14	Incentives should be given to lecturers who uses ICT in lesson presentations	2.75	2.60	2.00	3.25	3.33	3.63	3.03	0.89	Agree
15	Procurement and use of ICT based teaching aid(Media/visual aids)	3.25	3.60	4.00	3.25	3.67	3.88	3.57	0.50	Agree

Key: \bar{X}_1 = mean of Home Economics Lecturers whose length of service is 1-5years, \bar{X}_2 = mean of Home Economics Lecturers whose length of services is 6-10years, \bar{X}_3 = mean of Home Economics Lecturers whose length of services is 11-15 years,, \bar{X}_4 = mean of Home Economics Lecturers whose length of services is 16-20 years, \bar{X}_5 = mean of Home Economics Lecturers whose length of services is 21-25 years, \bar{X}_6 = mean of Home Economics Lecturers whose length of services is 26 years and above, \bar{X}_G = Grand mean, SD= Standard deviation.

Table 3 shows the mean responses of respondents on the measures for enhancing ICT utilization among Home Economics lecturers in south Eastern Nigeria. The data revealed that all the items were agreed by the respondents as measures for enhancing ICT utilization in south eastern Nigeria.

The standard deviation of each measures for enhancing ICT utilization in south eastern Nigeria is less

than 1.00, implying that the responses made by the respondents individually were close to one another and are not far from the mean.

4. Discussion of Findings

The findings of the study revealed that the following were low extent utilized: use of computer in giving notes, online assignment, teleconferencing, soft copy notes, use of skype, MS Excel in result computation, use of DVD player recorder, use of television set, use of projector and use of ICT in lesson preparation and presentation. This confirms the study of Azu and Modebelu (2013) that teleconferencing, skype, power point presentation, video recorder, interactive white board and television set were low extent utilized ICT tools for effective teaching and learning of Agricultural education by academic staff in south east Nigeria. Again the findings agree with Ogunsola and Aboyade(2005) that most higher educational institutions in Nigeria even those with good Internet connectivity are still at the low level of the integration of ICT into teaching, learning, research, library, information and managerial services.

The findings of the study revealed the challenges of ICT utilization as: lack of competence in handling ICT, inadequate time for training in ICT, lack of incentives and motivation for lecturers, inadequate technical support for lecturers, poor funding to procure ICT facilities, poor maintenance of ICT facilities, lack of skilled computer maintenance personnel and poor connectivity to internet service.

This is supported by Aduwa-Ogiegbaen, & Iyamu (2005) that stated that several impediments to the successful use of information and communication technology in secondary schools in Nigeria include: cost, weak infrastructure, lack of skills, lack of relevant software and limited access to the Internet .Okebukola(1997)added that those who are designated to use computers in Nigeria do not receive adequate training, at worst, do not receive any training at all . Carlson and Firpo (2001) stated “teachers need effective tools, techniques, and assistance that can help them develop computer based projects and activities especially designed to raise the level of teaching in required subjects and improve student learning”.Aduwa &Iyamu (2005) supported that there is acute shortage of trained personnel in application software, operating systems, network administration and local technicians to service and repair computer facilities.

The findings of the study revealed that the following measures should be employed for enhancing ICT utilization among Home Economics lecturers in south eastern Nigeria: Training home economic lecturers on ICT, Allotting enough time for lecturers to practice on ICT, Individuals and communities should organize and provide fund for the procurement of ICT facilities, ICT implementation in schools should be taken serious by the government,

Power supply that enhances the use of ICT should be regular, Hiring ICT experts outside the school system to give informal lecture to lecturers and students, Government should provide more funds for ICT development in Schools, Establishing efficient ICT centers capable of servicing large number of students from nearby intuitions, Involving Home Economics lecturers in planning and discussions on issues relating to use of ICT, Creating proper awareness on the benefits of ICT in development among lecturers , Affording the lecturers opportunities for in- service training on ICT, School management to encourage lecturers to use ICT in lesson preparation and presentation , Workshop to be organized for lecturers on the benefits of using ICT in their teaching activities, Incentives should be given to lecturers who uses ICT in lesson presentations, and Procurement and use of ICT based teaching aid(Media/visual aids).

5. Conclusion

Information and communication technology is indispensable in teaching and learning especially subjects like Home Economics. Therefore for a successful teaching and learning of Home Economics to take place, the lecturers, individuals, communities, government and school authorities must make frantic efforts to provide all the necessary facilities (both human and non-human resources) needed for the utilization of ICT in teaching and learning of Home Economics.

6. Recommendations

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

1. Workshops, conferences, seminars, in-service training and improvement programs should be organized by schools to train lecturers on ICT utilization.
2. Individuals, communities and government should organize and provide fund for the procurement and maintenance of ICT facilities.
3. School management to encourage lecturers to use ICT in lesson preparation and presentation.

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