

STRATEGIES FOR ENHANCING THE USE OF ICT IN HOME ECONOMICS EDUCATION

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Abstract

Information and Communication Technology (ICT) are new technologies affecting various fields of human endeavour. In the field of education (Home Economics Inclusive) It can also have a tremendous impact when teachers use the ICT to enhance students understanding of the concepts. The problems and prospects of the use of Information and Communication Technology (ICT) were highlighted considering the great benefit in the use of ICT; some possible strategies to be adopted were discussed to improve the use of ICT in teaching and learning of Home economics in tertiary institutions.

The level of development in any society is usually determined by the quality and quantity of knowledge in the various spheres of human activity available to and required by the citizen. In education, teaching and learning can only be said to have taken place when behavioural changes are noticed in the learner as a result of, his joint interaction with the teacher under a conducive environment (Ayo (2002) Rapid technological advancement over recent years have created a lot of challenges which educational systems in Nigeria have to face in order to determine more effective and reliable methods of teaching. To make the system more responsive to technological and advances, some major changes to the system are essential with the advent of computer based teaching/learning. Instructions are shifting from traditional methods of instruction to computerized methods of instruction in developed nation. As new ideas and methods of doing things are changing,

majority of educators are increasingly being faced with the challenges of using modern technology (computer) for teaching in their institutions (Adamu, 2001) Through the use of computers, the role of many teachers is changing from the traditional lock-step giver of information to that of presenter, manager and facilitator of learning Home Economics ideals with the general management of the home. It includes the preparation and preservation of food the care of our home and the skilled management of our textiles (Ugwu 2000). Home Economics is the field of knowledge and services primarily concerned with strengthening family living, improving the services and goods used by families, conducting research to discover the changing needs of individuals and families and the means of satisfying these needs. Home economics education means training and educational programmes for women, families and for communities to enhance family living.

The curriculum of Home Economics should be able to help the individual to meet changes in the society. The student should therefore be helped to appreciate underlying scientific principles as well as to help handle materials and equipment with confidence and sensitively. ICT is one of the technological changes in the society hence, there is the need to teach Home Economics with ICT facilities considering the role of Information and Communication Technology has, Nigeria must have to do something to overhaul its educational sector or it would continue to produce “analogue graduates” who cannot fit into the practice of

modern technology. However in recognition of the prominent role of ICT in advancing knowledge and skills. There is an urgent need to integrate Information and Communication Technology into courses in tertiary institutions especially in Home Economics Education.

Concept of ICT

The concept of Information and Communication Technology (ICT) embraces the process of information generation, processing, retrieval and dissemination. It is the technology of information handling from the point of generation through telecommunication networks to the point of utilization ICT has become a powerful communication tool which has broken the barrier of space and time and has reduced the world to a global village. Decomber and Heeks (1999) sees ICT as the electronic means of capturing, processing, storing and disseminating information. ICT also involves the use of computers and other electronic devices to process information. It creates opportunities for the user to handle text and images, numbers and graphics, sound, music, etc. it can help the school system to store, organize analyze, retrieve, present and communicate information. Ali (2002) stated that Information and Communication Technology has been used to simply availability and access to information. They encompass the following complementary technologies such as telephone, software technology, systems peripheral, web browsers and servers, multimedia systems, open micro processor system, etc.

Home Economics Education

Home Economics occasional is referred to as domestic science which is being taught at different levels of Nigeria's is educational system, it is recognized at all levels of the educational system in Nigeria from primary to tertiary levels. Anyakoha (1991) defined Home Economic as the application of many sciences

and arts towards achieving a healthy and happy home "Home Economics is one of the core vocational subjects which helps to educate the students and equip them with skills to face life challenges. The teaching of Home Economics should move with today's rapidly changing world and must be done with adequate and useful instructional material. This helps the students to learn faster and better. Home Economics education through its various courses should provide learning experiences geared towards educating the youths for family living, develop creative expression for leisure activities, prepare for a job, contribute to National development and appreciate the importance of good family living (Nwankwo, 2004).

The Role of ICT in Teaching and Learning of Home Economics

ICT plays a tremendous role in teaching and learning as well as in research. Computers can revolutionize teaching at all levels of education. It enhances education efficiency.

As an ICT instrument, computer comes handy in teaching large classes and they enhance problem solving skills of the learner by focusing on the thinking skills of the learner (Ali, 2002). Kosakowaski (1996: page 11) summarized the five observed benefits of ICT to include:

1. Applications of Technology to basic skills using educational technology for drill and practice of basic skills can be highly effective according to a large body of data and a long history of use. Students usually learn more and rapidly in courses that use computer assisted instruction.
2. Application of Technology to advanced skills – the new technologies allow students to have more control over their own learning and to think analytically.
3. Effects of Technology on students attitudes – students feel more successful in school and are motivated to learn and have increased self confidence and self

esteem when using computer assisted instruction. This is particularly true when the technology allows the students to control their own learning.

4. On-line Technologies – Recent studies illustrate some observed positive effects of the internet in the class room.

A study by center for applied special technology (1966) shows significantly higher scores on measures of information, management, communication and presentation of ideas for experimental groups with on-line access than for control groups access. use of technology by teachers and administrator – Teachers and administrators use computer and information Technologies to improve their roles in the educational process Example include using computer tools to streamline record keeping and administrative tasks, thereby helping to free up time for instruction or professional development. Decreasing isolation by using e-mail and the internet to communicate with colleagues parents and the outside world and increasing professional development activities by taking distance education courses, accessing educational research and accessing classroom materials such as lesson plans.

Computer based ICT tools go a long way in enhancing teaching and learning process and provide the teacher access to the use of strategies which are less stressful in that students would naturally work on their own in groups. David (2004: page 3) in his own contributions stated that the benefits of ICT includes the following

- (1) Provision of students with the chance of studying, investigating and practicing complex skills, procedures and concepts in a realistic but non-risk situation.
- (2) Instruction can adapt to the abilities and preferences of the individual student and increase the amount of personalized

instruction, a student receives. Many students benefit from the immediate responsiveness of computer interactions and appreciate the self-paced and private learning environment.

- (3) ICT will help teachers in supplementing their lessons through drill and practice software or private primary instruction learning centres through tutorial or simulation software.
- (4) Help teachers to improve their performance better and enable them to enhance achievement of their students.
- (5) ICT will to some extent minimize the problem of teachers scarcity in certain areas of specialization. Many teachers can make use of computer assisted software as an aid to internet with a group or whole class of students.

Problems of Using ICT in Teaching and Learning of Home Economics

The effective use of ICT in teaching & learning of Home Economics in tertiary institution are faced with the following problems

- (1) Lack of ICT equipment – Most tertiary institutions that offer Home Economics do not have the relevant ICT equipment. Even the ones available do not have softwares for the computers to be functional
- (2) Inadequate personnel – Some of the Home Economics teachers are not computer literate and as such are not able to reflect any aspect of ICT in their teaching.
- (3) Constant electricity failure experienced in Nigeria militates against computer usage in schools.
- (4) Another impediment to the use of computers and other technologies in the classroom could be attributed to the syndrome of resistance to change among Nigerian teachers. They view the incorporation of computers for instruction

- as a means of displacing them from their jobs.
- (5) Inadequate textbooks, workbooks and other teaching aids can hinder effective use of ICT skills in teaching and learning of Home Economics. Books on ICT are hard to come by.
 - (6) Lack of repair and services of maintenance facilities for even the few existing computers. Some computers are not properly maintained due to lack of funds.
 - (7) Workshops on ICT should be organized for Home Economics teachers yearly to update their knowledge on ICT.

Strategies for Improving the Use of ICT in the Teaching and Learning of Home Economics in Tertiary Institutions

- (1) Retraining of Home Economic teachers for effective use of ICT in teaching: Home Economics, teacher must be computer literate and are needed to apply their expertise in choosing the curriculum tasks, organizing each lesson in terms of multimedia based and non- multimedia based activities, interneting with a students during a lesson, monitoring progression as well as promoting discussion and reflection among students.
- (2) Conferences/seminars/workshop on ICT: Conferences and seminars on ICT should be organized for Home Economics teachers yearly. Research findings from these conferences/seminars/workshop will help them. ICT when it becomes part and parcel of our school system can facilitate the disseminations of these research finding to teachers.
- (3) Change in the context of Entire educational system. In order to use ICT in Home Economics teaching, there should be a change in the context of educational system like emphasis should shift from importing knowledge into learners to developing thinking and learning skills.
- (4) ICT education should be included in the educational curriculum so as to make students computer literate.
- (5) Emphasis should be shifted from learning in segment of discipline to inter disciplinary approach. ICT could be utilized in Home Economics curriculum.
- (6) Local assistance – The computer and its related technologies can be purchase by soliciting for the help from the community through Parent Teachers Association, Non-Governmental Organizations (NGOs), charitable organizations and the private sectors. By so doing, the government in collaboration with the citizen will be able to tackle the problem of fund.
- (7) Computer science as a subject should be made compulsory at both primary and secondary education level to lay solid foundation for further development of computer literacy at tertiary level.
- (8) Tertiary institutions should seek the assistance of appropriate international bodies such as UNESCO, UNICEF Computer Aids Instructional etc. The foreign assistance could be in the form of provision of ICT hardwares and softwares, power generating sets etc.
- (9) School administrators should mobilize staff and students so that their attitudes to the use of ICT is focused on using it as a tool for research, teaching aids learning rather than as toys or gadgets for decoration.
- (10) Students should experience innovative technology – supported learning environments in their study. A power point presentation can enhance a traditional lecture. Using multi-media cases to teach topics that have previously been addressed through lectures may well be an example of a learning experience transformed by

technology. Students should experience both types of uses of technology in their programme.

Conclusion

ICT is highly revolutionizing all aspects of education especially Home Economics education. ICT is a veritable strategy for enhancing Home Economics education and national development. The Government should therefore create the enabling environment by providing modern ICT facilities to our tertiary institutions so that the objectives of Home Economics education will be achieved.

Recommendations

Based on the discussion of this paper the following are recommended:

1. The Government should equip Home Economics Education Department with adequate ICT facilities to accommodate both theoretical and practical instructions for all the students.
2. Teachers should organize orienting activities to help students manage learning from ICT packages. As they provide students with structure that guides them on a given task as they work through computer packages.
3. There should be greater involvement of government at all levels, communities and parents in the funding of computer programmes and its acquisition at all levels of education.
4. Home Economics teachers should be sponsored to workshops, seminars and conferences on ICT so as to update their knowledge and skills on these innovative teaching approaches.

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