Application of Information and Communication Technology (ICT) to Citizenship Education in Nigeria

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Abstract
Citizenship Education has gained independent status in the curricula of Nigerian higher institutions, as a distinct discipline. It is a core course in the General Studies programmes of the various higher institutions in the country because of its significance in national growth and development. This paper examines the importance of using Information and Communication Technology (ICT) to enhance the performance of lecturers and students of General Studies department. The world is moving rapidly into digital media and information. ICT in Citizenship Education needs to be fully developed to make teaching and learning easy. The paper recommends that Computer Programme Device (CPD) packs and other materials should be provided to enhance effective Citizenship Education in Nigeria.

Introduction
Information and Communication Technology (ICT) is an electronic method of computing, processing and storing of information. ICT equipment include: computer, internet, CD-Rom, radio, television, video, digital cameras, mobile phones etc that can be used by Citizenship Education lecturers and students to support teaching and learning. In the past, the conventional process of teaching Citizenship Education revolved around lecture planning and leading students through a series of instructional sequences to achieve a desired learning outcome.

Typically, these teaching methods revolve around the planned transmission of a body of knowledge followed by some forms of interaction as a means to consolidate the
knowledge acquisition. A contemporary learning theory is based on the notion that learning is an active process of construction knowledge rather than acquiring knowledge. Instruction is the process by which this knowledge constructed is supported rather than a process of mere passing on of knowledge (Ron, 2003).

**Importance of ICT in Citizenship Education**

The knowledge of ICT materials to Citizenship Education will change our ideals about teaching and learning of citizenship Education by increasing the amount of information available to students and lecturers. If these provisions are made, in the shortest and foreseeable future, we might reasonably expect plausible developments to improve our approaches over teaching and learning of Citizenship Education in the Nigerian perspective. Handling personal computers (durable computing power), memory and connection to the internet will improve lecturers and students’ interest in Citizenship Education. This is because materials are easily sourced to enhance new concept teaching in Citizenship Education. Computers are able to take spoken commands and give spoken responses. Computerized translation between languages to and from any combination of written or spoken material will be available. Broad-based access to the internet will allow such activities as high quality live broadcasts of lecturers’ video-on-demand, and life demonstration and so on. We can have immediate visual and audio access to friends and colleagues all around the world. Advances in Artificial Intelligence (AI) will allow vastly superior search for information, which will be available from an ever-widening array of resources. Advances in ICT will increase the amount of information available to our students as they study their courses and finally transit into the work place.

The primary goal of every Citizenship Education lecturer is to provide students with quality education. In order to achieve this goal articulation, we must use effective tools in transforming Citizenship Education information to our students. The only way out is to employ ICT as; a better change to the teaching and learning of Citizenship Education. More fundamentally, by promoting networking, communities of learning and research, solving of real-world, complex and interdisciplinary problems, individualistic learning, supported artificial intelligence etc. ICT is useful to learning in the sense that it reassures students to acquire global thinking skills and positive attitude to concept learning in Citizenship Education. Effective ICT makes students to be actively engaged in learning experiences that are designed to deepen, connect and build on students’ knowledge of thinking together. Instruction must provide students with opportunities for listening, speaking, reading, writing and representing so that they can communicate with concepts in Citizenship Education, examples could be in National ethics and personal discipline etc.

ICT assisted instructions enable Citizenship Education lecturers to identify and address students’ strength, interest and learning styles accessible to all (Monaghan, 2004). Emphasis must be on technology information in problem solving and reasoning in tackling issues in Citizenship Education like corruption, terrorism etc. In order to advance in knowledge and skills necessary for effective functioning in this modern world, there is urgent need to integrate ICT into Citizenship Education in Nigeria (FRN, 2004). Lack of demonstrable progress in improving educational performance in
Citizenship Education and other subjects has led some people to view the problem of change to ICT as inherently unsolvable and unachievable within the Nigerian public education system. Whereas access to appropriate digital cameras build excellent skills for students in rapid response to questions asked during Citizenship Education instruction; a scanner for photos and images produced can be pasted on documents for real and interesting thereby, discouraging forgetfulness.

The ICT enables Citizenship Education teachers to plan their lessons adequately and effectively due to accurate and updated information obtained from the CD-Rom and internet sites. It makes students to update information given to them in class. The internet sites and CD-Rom enable the students to do follow-up lesson to include detailed analysis of how and why they have selected their management strategy. The Citizenship Education teacher shares the class into groups on a topic. Microsoft Power Point (MSPP) is designed for such group presentations. Images and photos from digital cameras and the internet can easily be imported into the programme. Using a computer projector brings a real sense of purpose to the students’ understanding.

Developing ICT Skills for the Workforce in Contemporary Society

After leaving school to embark on a career, young people can expect the day-to-day practice of every discipline to be more affective by the use of ICT. In future, economic competitiveness, employment, and personal fulfillment may no longer be used on the production of physical goods. Personal and national wealth creation may be linked to the production and dissemination of knowledge. This depends on research, education and training, and on the capacity to innovate, having advanced ICT skills and knowing how to use discipline, specific applications may help students secure suitable employment and enhance their productivity once employed. Furthermore, as has been noted above, the ability to engage in life-long learning opportunities offered by educational institutions around the world is increasingly dependent upon access to, and use; of ICT, which Citizenship Education is not an exception.

In the light of changing perceptions about what constitute appropriate skills for the modern era, some organizations are promulgating educational standards, attempting to codify what all students should learn about ICT. For example, the National Education Technology standard (NETS) project in the United States of America has released an initial set of national education technology standards for pre-college students (cnets.iste.org). The NET standards are divided into six categories including “Basic Operations and Concepts”, “Social, Ethical and human issues”, Technology Research Productivity tools”, Technology Communications tools, “technology and decision-making tools” (International /society for technology in Education ISTE, 1998). It is anticipated that the increasing use of ICT in Citizenship Education and society will change the nature of the knowledge and skills students must acquire in order to compete and contribute in an increasingly ICT dominated global Economy.
Creating an ICT enabling environment in Citizenship Education

In this unit the authors concentrate on the development of ICT enabling learning environments. Specifically learning environments bothering on Infrastructure, Content, Teacher Education and Training and Technical Support are highlighted. 

**Infrastructure:** In order to make use of digital ICTs, schools must be equipped with computers. In order to access the internet from a computer, schools, homes, libraries and other Educational venues must be equipped with an internet connection, either by means of the telephone or cable network and a modern or a direct connection. Many creative means to providing computers and building the necessary internet infrastructure are being explored in countries throughout the world.

**Content:** Beyond equipment and software, appropriate content is necessary to make use of ICT for educational purposes. The researchers examined a few of the many initiatives related to educational content creation and standards. Prominent among them are:

**Schoolnets:** One approach to facilitating access to appropriate educational content is the creation of “schoolnets”. Schoolnets, also known as “national education grids”, are regional, national or local projects that may include effort to physically wire schools to information services, but that are fundamentally developed to provide access to appropriate educational content. Fulton (1998) stated that schoolnets may contain curriculum guides, collaborative online projects, e-mail directories, links to other teachers, schools, online classes, tutorials etc.

**Teacher Education and Training:** To create ICT enabling learning environments, it is also necessary to provide ICT training for teachers. As noted by Guskin (1996), “the changes being asked of faculty members in restructuring their work lives will be extraordinary and will require them to function in ways they never conceived of and for which they were not trained”. In some countries, for example, Great Britain, it is now required to have training in ICT to earn a teaching credential (Teacher Training Agency, 1998). Beyond preparatory training, as educational applications of ICT continue to evolve, refresher training for experienced teachers will be necessary. In one possible framework for organizing ICT for teachers, McDaugall and Squires (1997) identify five areas (i) skills with particular applications (ii) integration into existing curricula (iii) information technology related changes in curricula (iv) changes in teacher role and (v) underpinning theories of education.

In Iceland, the University College of Education offers a Bachelor of Education (B.Ed) degree via the Icelandic Education Network (http://www.ismennt.is). In Denmark, teacher education is being conducted using ICT including computer-mediated conferencing (CMC) supplemented by satellite-based tele conferencing, multimedia and standard computer-based training (Ingesman, 1997). A final example of how ICT is being used to support teacher education, the TRENDS (Training Educators through Networks and Distributed Systems) project (http://www.Irf.gr/English/trends/trendshome.html), a collaborative effort of the seven European Union countries, is developing an in-service, school-based teacher training system based on multimedia and network technologies.
Technology support: Oftentimes standard service agreements, purchased separately or included in the purchase of ICT equipment and software, typically cover regular maintenance and repair costs, and may even include e-mail or telephone support, such arrangement may fall short of what is necessary in educational settings. Without adequate technical support, schools have experienced “large workloads for existing staff, maintenance backlogs, and reduced computer use because computers were out of service (US Government Accounting office, 1998). The provision of on-site, timely technical support may be critical to the success of an ICT-based Educational Programme.

In summary, ICT implementation in education is a difficult, expensive and complex undertaking that must consider a host of issues including infrastructure, curricula changes, teacher training, technical support and so on. Such an undertaking, especially on a national level like Nigeria requires careful planning so as to have an enabling learning environment.

The Way Forward
Citizenship Education will succeed better if the following could be incorporated:
1. Educational policy and goal setting in ICT.
2. Institutional development and capacity building.
3. Investing in preparing students and teachers for technology-based jobs.
4. Creating schools using ICT as their core educational delivery system.
5. Recreation of curriculum, in which information technology is embedded and an equivalent adaptation of the rules for examination.
6. Development of an advisory council to help the government in promoting the introduction of ICT in education.
7. Using broadcast technologies, including computer networks, to reach learners in remote areas.

Conclusion
The creation, maintenance, protection and transfer of intellectual property assets are increasingly important in today’s global economy. The availability of ICT and the ease with which the fruits of human creativity may be duplicated, incorporated into multimedia projects, and transmitted worldwide has led to increasing efforts to govern such use. In an era where every student and teacher is a potential publisher of multimedia materials that incorporate the works of others, information and training efforts to bring ICT use into the classroom.

References


