Information and Communication Technology (ICT) Competencies Required of Business Educators for the Actualization of Vision 2020 Agenda in Nigeria

Umezulike, A. N. - Department of Business Education, Nwafor Orizu College of Education, Nsugbe

Ile, C. M. - Department of Business Education, Nwafor Orizu College of Education, Nsugbe

Abstract

The study was aimed at finding out from business educators, the ICT competencies required of them for the actualization of vision 2020 Federal Government 7-points agenda. The study was carried among 54 business educator in all the tertiary institutions in Anambra State of Nigeria. Mean ratings and t-test statistics tested at 0.05 significant level were used in analyzing data collected in the study. The results of the study revealed that adequate provisions of ICT equipment/facilities will enable the business educators possess the required ICT skills and knowledge. Possession of ICT competencies by the business educators will invariably help in reducing the obstacles in teaching modern business courses thereby making it possible for actualization the of Vision 2020 agenda through business education. It was recommended that for the actualization of Vision 2020 agenda through business education to be possible, government and management of tertiary institution should provide enough ICT equipment/facilities in our educational institutions and business educators on their own part should make judicious use of these modern equipment in teaching business courses.

Introduction

For one to be called a professional one must undergo some training and modifications relevant to that profession, and the acquisition of necessary skills and competencies for that particular profession. The training should follow sequential guidelines mapped out for the achievement of the curriculum objectives of that profession. The federal government in her National Policy on Education (2004) upholds that Nigeria's philosophy of education is based on the integration of the individual into a sound and effective citizen and equal educational opportunity for the citizens of the nation at the primary, secondary and tertiary levels both within and outside the formal school system. It was further stressed that for the education philosophy to be in harmony with national objectives, it must be directed towards self realization, better human relationship, individual and national consciousness, national unity as well as social, cultural, economic, political, scientific and technological development.

Business educators are professionals specially trained to impart into people such knowledge, skills, understanding, and attitudinal modifications that will help them partake in education and business as producers and consumers of goods and services.

Information and Communication Technology (ICT) tools are new in every aspect of our lives both in education and business. The use and application of ICT tools have brought the whole world into one global village. Every educational system had included in their curriculum current innovations and had started training the populace to acquaint themselves with skills required to operate these modern equipment. Morrison (1998) maintained that presently business teachers are no longer the main purveyor of instruction and educational institutions are almost computerized, and that business teachers are expected to exhibit mastery of these modern technologies during their course of training. This will enable them improve on their teaching methodologies for modern education and office skills for the actualization of 2020 vision. Morrison further stressed that typewriting and book-keeping/accounting can be performed by ordinary pressing of buttons using ICT. Office work can now be done from different locations including homes, market places, aeroplanes etc.

Business education equips business students with education for business and education about business. Ndinechi (2001) specified that education for business provides students with the following occupational skills:

- recording, retrieving, coordinating and reporting data used for business decision.

- marketing, merchandizng and managing the flow of goods and services.

- improving personal skills useful in business occupations.

- Education about business however affords the students skills necessary:

- for understanding business and its relationship to the total economy;

- for personal consumer competence and the ability to relate the role of the consumer to the total economy; and

- personal skills related to business occupations.

Since the major mission of vision 2020 is to make all the citizens contributors towards economic development, the above identified skills will prepare the graduates to be effective workers and well informed citizens to improve on modern business systems.

Cheung (1997) in his own contribution stressed that business education does not only train business teachers but also train individuals to fit into occupation outside the classroom such as office management, personnel management, production management, financial management and operations management. Cheung (1997) expressed the view that ICT is fast revolutionalizing the way we live and work and, in fact, every aspect of our life and life style. Ile (2005) maintained that this revolution has given mankind ability to treat information with mathematical procession to transmit it at very high accuracy and to manipulate same at will. Carrillol (1999) posited that the competency base of many organization today loose currency. The loss of currency is not just unconnected with the shortening-time-life of technologies and the need for people to acquire new skills, but is also related to developing life-long-employability. This rapid changes in the society has led to reformation in business education curriculum so as train and equip the present and future business graduates to use high-technology equipment to communicate, cooperate, negotiate and collaborate with businesses both locally and globally.

Carrillol (1999) went further to emphasize that business teachers should be capable of working in teams be able to, cope with constant changes, have

ability to analyze information and make appropriate decisions. He also stressed that business teachers should be able to understand the computer language and have knowledge of various computer equipment/programme applications.

Patrum (2002) advocated in the UNESCO business education report that every business teachers must not only be familiar with ICT equipment but should be capable of using them during teaching.

Change will continue to occur in the society and business teacher education curriculum will continue to be adjusted to integrate new course programmes to match the changes. Hence to Leon and Leon (1999) believe that the ability of today's business students to manipulate and operate the modern equipments will enable them change jobs several times instead of holding to a single job for upwards of 20-40 years.

ICT Equipment Required for Teaching and Learning Business Education Courses:
The importance of using equipment/instructional materials in teaching and learning business courses cannot be over emphasized. This is because teaching and learning of business courses from the onset requires the availability of physical equipment for effective instructional delivery. According to Umezulike (1997) instructional materials are all materials, equipment and devices which can be used to make teaching effective and learning interesting. The physical use of equipment during teaching has the potency of committing the five senses to the process of learning pleasant competencies for BTE courses. Umezulike(1997) went further to assert that certain concepts are better explained by the teacher and appreciate as much as possible by the learner if visual as well as auditory sensations of such concepts are appropriately perceived by the learners. This agrees with the dictum which says that "you remember about one fifth of what you hear, half of what you see and three quarter of what you do yourself ".

Every educational system or technology is a dynamic phenomenon said Nwosu (1999) A machine or curriculum in use today may not only become obsolete tomorrow but can be replaced by a new one. Moving further Nwosu maintained that the introduction of sophisticated telecommunication equipment, electronic mail system, computer and word processor, coupled with the needs of business management, teaching has changed old work habits of business teachers resulting in complete job re-designations and

acquisition of new skills. Kalaus (1985) in his own contribution stressed that many remarkable changes have occurred and are still occurring in education, offices and other aspects of life. These changes have brought about an over-hauling of the entire society.

Morrison (1998) in his study pointed out that innovations in ICT are seen by many people as revolutionary, unparalleled, tremendous and unprecedented. These changes generally reflect on the entire business education programme. The teaching of business courses is more interactive now than before. According to Morrison, computer with internet facilities, very small aperture terminal and electronic organize are some of the ICT facilities that can be used in teaching business education courses. Other ICT facilities suggested by Okenji (1997) include voice messaging system, e-mail, interactive radio, videotext, word processing machine, photocopying machine and computer scanner. Other ICT facilities identified by Thomas (2006) include Asynchronous, Java Script & XML (AJAX), internet protocol (IP), web 2.0, software as a service (SaaS) etc.

ICT facilities are growing astronomically. New discoveries researches and inventions are emerging. This advancement will run through the in 21st century and into another millennium. Business educators and their graduates should therefore sport out measures for combating the challenges these innovations could bring to the education and business world.

Problems Associated with the Use of ICT Gadgets in Teaching Business Courses

ICT was originally an off-spring of business education, but the profession appears to have lost grip because of sheer inertia at the onset, of imbibing a process that was aimed at displacing it. Despite the numerous benefits accruing from ICT usage, many institutions of higher learning still show reluctant move in using the facilities.

Ohakwe (2001) stated that the major problems that hinder the growth of the business education programme and the ICT in Nigeria are inadequate personnel, inadequate equipment/infrastructure, scarcity of curriculum experts, inadequate textbooks/work books and other teaching materials. Education nowadays has moved into the web, yet many business educators are not aware of how ICT can be used to enhance instruction in business education.

Poor maintenance culture, inadequate number of ICT engineers, non availability of ICT spare parts are some of the problems facing the implementation of ICT programmes in institutions of higher learning in Nigeria (Okereke,2006). Okereke admonished that to have ICT facilities is not a problem but to repair and maintain the facilities. He stated that most institutions of higher learning and business offices have enough ICT equipment but are not making use of them because they are not in good condition. Nigeria suffers from the dearth of engineers. Where the engineers are available, there will be no spare parts to replace the damaged ones.

Another pressing problem on the use of ICT equipment is poor network service. This according to Dolar and Wilson (2005) has resulted in undue complaints from users of ICT as a result of non availability of network services or the line being busy.

Kutelu, Oladapo, Adalu, George and Udensi (2006) attested that majority of our youths especially unemployed ones use internet for fraudulent acts like sending false and deceptive e-mails to foreigners, girls using it to seek for boy friends from the country. White men are gullible through internet etc. Laudon and Laudon (2002) estimated the damages ICT has caused Americans in excess of $1 billion. Information and communication technologies have created new opportunities for committing crime. Such crimes include new ways of stealing valuable items or harming others. Nwachokors (2005) identified the following as some new ways by which the internet can be used in committing computer crime and abuse: Hacking, Jamming, Malicious software (use of cyber café) and Spoofing.

If nothing is done to address these ugly situations, the much talked about role of ICT and economic development will become a bane rather than a boon.

Purpose of the Study
The main purpose of this study was to
1. Find out from business educators the ICT competencies required of them in teaching business courses for the actualization of vision 2020 agenda in Nigeria.

2. Find out from business teachers the ICT gadgets/facilities that are required for teaching business education courses in Nigerian tertiary institutions.

3.   Find out possible problems that hinder the use of ICT gadgets/facilities in teaching business education courses in Nigerian tertiary institutions.

Research Questions

The following research questions guided the study:

1.   What ICT competencies are required of business educators in teaching business courses for the actualization of vision 2020 agenda in Nigeria?

2.   What ICT gadgets/facilities do business teachers consider appropriate for teaching business education courses in Nigerian tertiary institutions?

3.   What possible problems could hinder the use of ICT gadgets/facilities in teaching business education courses in tertiary institutions?

Hypothesis

Ho$_1$:   Perceptions of business educators teaching in the universities do not differ significantly from those of their counterparts teaching in the colleges of education regarding ICT competencies required of business teachers in teaching business education courses for the actualization of vision 2020 agenda.

Research Method

Survey design was considered appropriate for the study because the study sought data and opinions of business educators regarding ICT competencies required of them in actualizing the aims of vision 2020 agenda in Nigeria. The study was carried using business educators in all the tertiary institutions in Anambra State of Nigeria. The 2007 tutorial staff statistics revealed that there were a total of 56 business educators in the 4 tertiary institutions offering business education in the state. The population of the study was therefore all the 54 business educators in these institutions. A structured questionnaire was used as instrument for data collection.

Results

Tables 1, 2, 3 and 4 below contain information on data collected in the course of the study.

Data from table 1 above revealed that all the identified ICT skills required of business educators were accepted by the respondents. This shows that for unbiased and successful vision 2020 agenda to be attained through the business education programme, business educators must possess all these identified skills and apply them during teaching.

Information from table 2 above shows that business teachers accepted 8 items namely:- micro computer, digital telephone/GSM, computer networking, word processor, scanner, photocopies, Desktop printing and Facsimile machine and bulletin board as ICT gadgets and facilities appropriate for teaching business courses for the achievement of vision 2020 agenda in Nigeria. However dictating machine, voice messaging system, mobile web/interfaces, AJAX and web 2.0 were rejected either because they were not familiar with their usage or they see them as a duplication of facilities since the identified gadgets like computer, telephone and internet are capable of performing the same functions. Therefore, business educators may see them as irrelevant and duplication of materials.

Information from table 3 above indicates that out of 10 ICT problems identified, only one (non provision of retraining programmes) was rejected either because business educators felt that whether retraining programmes are provided or not, every business educator is supposed to be computer literate and be involved in self-development. If nothing is done urgently to get rid of these identified ICT problems, achieving vision 2020 agenda through the business education programmes could be a mirage.

Result of t-test presented in Table 4 above shows that the t-calculated value is 0.73 and the t-critical value is 1.64 at 0.05 level of significance. Since the t-calculated value is less than the t-critical value, the null hypothesis is accepted. This indicates that no significant differences existed between the mean ratings of university business educators and colleges of education business educators on the ICT competencies required of business educators for the actualization of vision 2020 agenda.

Discussion of the Findings
The findings in Table I of the study showed that the attainment of vision 2020 agenda can only be possible through business education, if business educators should proficiently employ computer knowledge/applications and internet protocols during the teaching of business education courses. This is in line with the view of Thomas (2006) that applications and devices that let people hold on the information that they have interest in and move it across

devices as well add to the own context are very essential for economic development. The result also showed that business educators should constructively and critically analyze global, national and local economic problems and make appropriate decisions for the general well being of the masses. This the respondents believed they will achieve much through team work using the modern ICT facilities. The implication here is that effective and efficient economic development can never be achieved in isolation of ICT, and that individuals who are ignorant of ICT usage, would in due course, be cut off from daily happenings in the society for gone are the days of too many paper work/documentations.

The respondents in Table 2 accepted micro computer, digital telephone/ GSM, computer networking, word processing machine, scanning machine, desktop, facsimile machine and bulletin board as facilities needed for teaching business education courses for the attainment of vision 2020 agenda in Nigeria. The findings agreed with the earlier assertions of Morrison (1998), Okenji (1997) and Thomas (2006). Dictating machine was rejected by the respondents because they see it as an obsolete gadget. The study also discovered that business educators see mobile web interfaces, Asynchronous Java scrap and XML (AJAX) and web 2.0 as facilities not appropriate for teaching business courses either because they (business educators) were not familiar with their computer usage or that their system were not connected to the hi-web net workings. This group of business educators should understand that ignorance of ICT usage is no longer an excuse nowadays. Therefore, they should not wait for the government or the education authorities to queue them up with the world updates.

Business educators foresee in Table 3 that the attainment of vision 2020 agenda would be impossible where there is insufficient funds, none availability of computers, inadequate ICT manpower, poor electricity supply, insufficient teaching periods, high cost of ICT equipment, lack of ICT spare-parts and poor network service. This is true because one education theory states that one cannot give out what he/she does not have. It was observed that majority of the business educators are novice in ICT. Therefore, they cannot drill business students on ICT usage even where there are enough ICT facilities. No economy can today think of rapid development in the absence of ICT. However, the rate at which people commit frauds/crimes using ICT facilities have made many to develop negative interest in them. Many families due to ill-effects ICT have stopped their children/wards from engaging in internet browsing. Something must be done urgently to check

these ugly situations if Nigeria as a nation is hoping to achieve the federal government 7-points agenda of vision 2020.

Recommendations

The goals of the vision 2020 agenda can never be achieve in isolation of teachers who are the principal actors of any developmental process because no nation can develop more than their teachers. Therefore, business educators with ICT competencies are capable of producing business graduates who are expected to assume leadership positions.

To achieve vision 2020 agenda through business education, government should made enough funds available for the purchase of ICT gadgets/facilities which are mostly the main obstacles towards successful attainment of any developmental policy.

To ensure that all business educators owned ICT facilities, business educators and organizations should arrange for group purchase of the gadgets to reduce costs. Educational institutions and business establishments should also make available standby generator for regular usage of ICT facilities when there is power failure.

Tertiary institutions on their own part can organize fund raising activities by inviting philanthropic individuals to come to their aids. They can also task parents by charging development levy for the provision of ICT gadgets and facilities in their institutions. If ICT gadgets/facilities are provided, it behooves business educators to try as much as possible to make judicious use of them in teaching business courses for the attainment of vision 2020 agenda in Nigeria.

Conclusion

Vision 2020 agenda in Nigeria could only be achieved through business education if business educators should possess and apply ICT skills in their teaching of business courses.

The acquisition of ICT competencies will enable the business educators use various ICT gadgets in teaching business education courses and device means of tackling problems that are associated with the use of ICT gadgets.

References

Carrilo, I.J. (1999). *The Knowledge management movement: current derives and future scenarioe*. ITESM: Centre for Knowledge system.

Cheung, C. K. (1998). Business Education in Hong Kong after 1997. *Journal of Education for Business **73*** (6) 333-335.

Dolar, R.T.F. and Wilson, O.O. (2005). Consumer satisfaction with GSM service in Warri metropolis. *Business Education Journal 5* (1) 68-72.

Federal Republic of Nigeria (FRN, 2004). *National Policy on Education.* Lagos: NEDRC.

Ile, C.M. (2005). Competencies needed by business education graduates to survive in advanced information age. *Business Education Journal **4*** (1) 77-83.

Kutelu, Oladepo, Adalu, George and Udensi, C. (Jan. 25, 2006). Negative effects of Internet. *Daily Sun pp. 21*.

Laudon, K.C. and Laudon, J.P. (2002). Management information systems. New Hersey: Prentice-Hall Inc.

Leon, J. and Leon K, L. (1999). Enhancing business school effectiveness. American management Association. 65(4) 135-138.

Morrison, J.L. (1998). Power learning in digital age: bring reality to the discipline. *Journal of Education for Business 73* (5) 261-263.

National Commission for Colleges of Education (NCCE, 2002). *Minimum Standard for NCE teachers*. (3ʳᵈ ed.) Abuja: NEDRC.

Nwachokor, J. O. and Akume, B.C. (2005). Ethical and moral dimension of information and communication technology. *Business Education Book of Readings I* (5) 89-91.

Nwosu, A. N. (1999). Training and developing business educators as a coping strategy for the emerging technological innovations in secretarial education*. Business education journal 3(2) 40-46.*

Okereke, E. (2006). *Handbook on computer engineering*. IMSU, Onitsha Information center.

Patrum, J. K. (2002). *Teacher and information technology. Training Leadership 83 (2) 54*-56.

Thomas, R. (2006). Life online: the web in 2020 A; a study by the social issues – research center. http://www.orgn/publik/2020.pdf.

Umezulike, A. N. (1997). Accounting teachers' perceptions of the problems of teaching accounting at the public secondary in Onitsha North Education Zone. Unpublished degree thesis, Nnamdi Azikiwe University, Awka.

Table 1: Mean Ratings of ICT Competencies Required of Business Educators Them in Teaching Business Education Courses for the Actualization of Vision 2020 Agenda

Items	ICT Competencies required to business teachers	$\bar{x}$	Decision
1.	Ability to understand computer language	4.23	Accept
2.	Knowledge of various computer equipment and programme applications	3.92	Accept
3.	Ability to manipulate the computer keyboard	4.50	Accept
4.	Knowledge of protocols in the internet	3.50	Accept
5.	Ability to analyse information and make appropriate decisions.	3.50	Accept
6.	Ability to develop constructive thinking and problem solving skills	3.51	Accept
7.	Ability to understand global, national and local trends	3.52	Accept
8.	Ability to work in team and the ability to cope with constant changes.	3.75	Accept
9.	Ability to communicate with people using ICT facilities	3.80	Accept
10.	Ability to develop business and communication proficiency for accurate details about economic development	3.50	Accept

Table 2: Mean Rating of ICT Gadgets/facilities Considered Appropriate for Teaching Business Education Courses in Order to Attain the Vision 2020 Agenda.

Items	ICT Gadgets/Facilities	$\bar{x}$	Decision
11	Micro computer	4.56	Accept
12.	Digital Telephone/GSM	4.26	Accept
13.	Computer networking (internet/Browsing)	3.65	Accept
14.	Word processing machine	3.86	Accept
15.	Scanning machine	3.50	Accept
16.	Desktop printing	4.56	Accept
17.	Photocopiers	3.96	Accept
18.	Dictating machine	3.24	Reject
19.	Facsimile machine	3.50	Accept
20.	Voice messaging system (VMS)	3.02	Reject
21.	Bulletin Board	3.52	Accept
22.	Mobile web and interfaces	3.00	Reject
23.	Asynchronous Java scrap & SML (AJAX)	3.05	Reject
24.	Web 2.0	2.95	Reject

Table 3: Business Teachers' Perceptions of the Possible Problems that could Hinder the Use of ICT Gadgets/facilities in Teaching Business Education Courses

Items	Problems associated with ICT usage	$\bar{x}$	Decision
25.	Non availability of ICT spare parts/poor maintenance culture	3.65	Accept
26.	None availability of computers	4.63	Accept
27.	Inadequate number of business teachers with ICT knowledge (manpower)	3.85	Accept
28.	Inadequate power supply	4.55	Accept
29.	Insufficient teaching periods.	3.50	Accept
30.	High cost of ICT equipment	3.87	Accept
31.	Non provision of retraining programme.	3.22	Reject
32.	Poor funding on the part of the government.	3.75	Accept
33.	Poor network service.	3.99	Accept
34.	High rate of criminal manipulation in using internet services	3.58	Accept

Table 4: T-Test Analysis at 0.05 Level of Significance of Business Teachers Regarding ICT Competencies Required of Them for the Actualization of Vision 2020 Agenda

Business educators		x	S^2	Df	T-cal.	T-crit.	Decision
Universities	12	3.81	0.64				
				54	0.73	1.64	Accepted
Colleges of Education	44	3.62	0.81				