



INFORMATION AND COMMUNICATION TECHNOLOGY SKILLS NEEDED BY OFFICE TECHNOLOGY AND MANAGEMENT STUDENTS FOR SELF SUSTENANCE AND NATIONAL DEVELOPMENT

Dr. Chigbuson, Akwa Jon

*Department of Office Technology & Management
Plateau State Polytechnic, Barkin Ladi
achigbuson@gmail.com*

Timya Nimfel

*Department of Office Tech & Managem
Plateau State Polytechnic, Barkin Ladi
timyanimfel@gmail.com*

Silas Titus Nguwap

*Department of Office Technology & Management
Plateau State Polytechnic, Barkin Ladi
snguwap@gmail.com*

Abstract

The study was designed to examine the information and communication technology skills needed by Office Technology and Management students (OTM) in Plateau State for self-sustenance and national development. Two research questions guided the study. The study employed descriptive survey design. 62 students were randomly selected from Higher National Diploma 1 and 2 in the department of office technology and management. Survey research design was used for the study. A structured questionnaire tagged Office Technology and Management Students Information and Communication Technology Skills (OTMSICTS) was developed on a 5-point Likert rating scale by the researchers for data collection. The instrument has 23 ICT items for research question 1 and 13 ICT items for research question 2 respectively. The mean and standard deviation were employed in answering the two research questions. The findings revealed that the 36 information and communication skills were needed by Office Technology and Management students for self-sustainability and national development. Based on the findings, the researchers made some recommendations which are ranging from the organization of regular workshops and seminar for lecturers to retool their technology skills for proper classroom instruction, provision of ICT facilities and internet connectivity of ICT laboratories by the institution's authority.

Key words: ICT skills, self-sustenance and national development.

Introduction

The progress of a nation is a function of the level of the resourcefulness of the people which to a great extent, relates to the level of quality of the training and purposeful development of education in that nation. Such progress or development could only occur when an individual in the society is gainfully employed and per capital income is enhanced. This could only be possible when government educational policies are geared towards a functional education that can lead to job creation and also self-reliance. Education, according to Agi and Yellowe (2013) is acknowledged as a variable tool for national development which requires deliberate plan to suit the development needs of a nation. This is so because it is geared towards the system of producing the right type of manpower in the right quality and quantity for nation building, and one of the national education goals is principally the acquisition of appropriate skills and the development of mental, physical and social abilities and competencies as equipment for the individual to leave in, and contribute to the development of the nation.



In any developing nation, the level of economic growth is tied to the level of technology that exists therein. Technology, by this means the ability to improve on the ways things are done for better performance, and it is only through the application of appropriate technologies that the skilful but jobless graduates can be made functional, and make meaningful contribution to the development of their nations. There is no doubt that the nations of the world that are technologically and economically strong have the story of their success rooted directly to investment in information and communication technology (ICT).

Esene and Mgbonyebi (2015), explain that today's world of work which is ruled by information and communication technology (ICT), is a complex one hence the need for the individual to obtain the kind of education that would equip him with knowledge, understanding and skills in order for him to be highly functional in the society. Moreso, the changing trend in the labour market profiles have increased the complexity of skills required by today's workforce. Thus, one must be equipped with the basic ICT skills to face the 21st century challenges of increased competition in world of work as most employers today need applicants with some ICT skills. Chigbuson (2014) affirmed this assertion that serious employers are less demanding of academic excellence and technical skills, as they consider them trainable if candidates are able to demonstrate positive attributes and soft skills. This, therefore, heightened the expectations of employers of labour with a demand for work ready graduates who have intellectual capacity and are also equipped with ICT skills.

According to Ehirheme (2014), the invention of computer and internet technology, has reduced the world to a global village where people buy from the same market, the same computer language and travel on the same information "super-highway". As a result of the new demand in the labour market, there has been a consistent global call for tertiary institutions to equip students with ICT skills by integrating the skills into their curriculum. This will enable students to adequately acquire and develop their employability skills. Also, the ability of applicants to have acquired basic skills in ICT and being familiar with computer usage, may open up a wide range of employment opportunities and increase their marketability in the workplace.

ICTs stand for information and communication technologies which can be defined as "a device or set of technological tools and resources used to communicate, and to create, disseminate, store, and manage information". These technologies include computers, the internet, broadcasting technologies (radio and television), and telephony (Abduraman, Yahya & Suleiman, 2014). The term ICT also refers to: *information channels* such as the *World Wide Web*, online database, electronic documents, management and accounting systems, intranet, etc. communication channels such as e-mail, electronic discussion groups, electronic conferences, the use of cell phones, etc. hardware and software used to generate, prepare, transmit, and store data, such as computers, radio, TV, computer programs/tools, etc (Zuppo, 2016). In a country like Nigeria where a vast section of the population lives below the poverty level, ICT offers a chance to these people through innovative social development and participatory application of ICT in agriculture, education, tourism, marketing, health, faith or religion, home management and governance Nwabuona



(2010) affirmed that Office Technology and Management (OTM) which is a component of business education, is designed and targeted to produce hybrid administrative professionals to respond to the demands of a dynamic and intensely computerized work place especially in this modern age of globalization, where equipment and new machines are emerging daily. Oyinloye & Oluwalola (2014), explained that OTM is a new nomenclature that emerged to replace the former Secretarial Studies Program and was introduced by the National Board for Technical Education in 2004 to make the program and its recipients more ICT compliant and to adequately fit into the world of work appropriately, especially in the 21st century global workplace. Office Technology and Management program, being a skill acquiring discipline, remains a relevant channel for the transmission of the appropriate ICT skills and knowledge in order to make its graduates ICT savvy to embrace globalization and meet the demands of today's work place.

Udo (2014) observed that even though ICT related courses have the greatest number of contact hours in the OTM curriculum aiming at ensuring that the recipients upon graduation would be proficient in the utilization of ICT resources in the workplace. However, most OTM graduates are deficient in area of ICT education and the skilled acquired cannot match with the demands of the labour market and technological advancement. It is therefore not surprising then to see many graduates of OTM all over the nation without gainful employment. OTM students can only acquire ICT skills for gainful employment or create jobs if a level playing field is accorded the program by the various education stakeholders. However, there are vast business opportunities opened for ICT compliant graduates whereby they can earn a living and contribute maximally to national development. They can engage in computer networking, web site design, programming and maintenance and servicing the computers and other ICT facilities and can even serve as consultants to the governmental and non-governmental organizations. They can also engage in commercial computer outfits as there is a great demand for printed documents in today's society and by operating or working in cyber cafes and computer training centers to train other youths in acquiring computer literacy thereby getting their source of livelihood.

Statement of the Problem

Analysts have argued that in Nigeria generally, the skills that job seekers possess do not match the needs and demands of employers (Mcgrath; Kent & Mushi in Oduwole (2015). This affirmed that the education system in Nigeria has its liberal bias which indeed over supplies the labour market with graduates who do not possess the skills required by employers. The global changes in economic competitiveness are creating an increasing demand for information and communication technology jobs for competent young men and women with requisite ICT skills. The teachers in tertiary institutions need to study the labour market requirements and tailor their teaching towards that direction. It is no longer refuting that self-employment and sustenance is one of the ways out of unemployment among graduates in tertiary institutions including OTM. Education especially in ICT is a necessary tool for self-employment and poverty alleviation. It is against this background therefore, that this



study seeks to investigate ICT skills needed by students of office technology and management for self-sustenance and national development.

Purpose of the Study

The purpose of the study was to determine ICT skills needed by office technology and management students for self-sustenance and national development. Specifically, the study determined:

1. Computer skills needed by OTM students for self-sustenance and national development.
2. Online ICT skills needed by OTM students for self-sustenance and national development.

Research Questions

The following research questions were raised to guide the study:

1. What are the computer skills needed by OTM students for self-sustenance and national development?
2. What are the online ICT skills needed by OTM students for self-sustenance and national development?

Methods

Descriptive survey design was adopted for the study. The study was carried out in Plateau State. The population of study comprised 62 respondents from HND 1 and 2 students in the department of office technology and management, Plateau State Polytechnic. Due to the small size of the population, the entire population was used for the study. A structured questionnaire tagged "Office Technology and Management Students Information and Communication Technology Skills (OTMSICTS)" was developed on a 5-point Likert rating scale by the researchers for data collection. The instrument has 23 items. The mean and standard deviation were employed in answering the two research questions. In calculating the mean for the various items, the response categories in the questionnaire were rated in scales as follows:

Response Category	Points	Boundary Limit
Highly Needed (HN)	5	4.50 - 5.00
Needed (N)	4	3.50 - 4.49
Undecided (U)	3	2.50 - 3.49
Not Needed (NN)	2	1.50 - 2.49
Highly Not Needed (HNN)	1	1.00 - 1.49

The data was analyzed with the aid of statistical package for social science (SPSS 21.0) and the results discussed were based on the questionnaire returned.

Results

Question One: What are the computer skills needed by OTM students?



Table 1. Mean Rating and Standard Deviation of Computer Skills needed to be acquired by OTM Students

S/N	Item Statements	Mean	SD	Decision
1	Ability to access and navigate the computer	4.79	.449	Highly needed
2	Ability to produce text document	4.90	.298	Highly needed
3	Ability to save document	4.89	.367	Highly needed
4	Ability to retrieve saved document	4.85	.474	Highly needed
5	Edit a document and delete document	4.42	.759	Needed
6	Ability to use photocopier	4.68	.647	Highly needed
7	Copy and update document	4.18	1.033	Needed
8	Centre, align and justify text	4.65	.770	Highly needed
9	Competency in desktop publishing	4.74	.541	Highly needed
10	Ability to view and delete documents	4.50	.784	Highly needed
11	Ability to use design and layout	4.21	.813	Needed
12	Ability to use Microsoft excel package	4.58	.821	Highly needed
13	Ability to use PowerPoint package	4.53	.671	Highly needed
14	Scan text or photographs into computer	4.61	.662	Highly needed
15	Ability to store document in CD and flash drive	4.34	1.023	Needed
16	Ability to operate electronic filling	4.44	.934	Highly needed
17	Ability to use scanning machine	4.08	1.132	Needed
18	Ability to manage information system	4.62	.789	Highly needed
19	Ability to prepare slide show using power point	4.85	.474	Highly needed
20	Knowledge of graphics and design	4.73	.450	Highly needed
21	Ability to use data base management package	4.69	.616	Highly needed
22	Ability to make designs using CorelDraw	4.77	.525	Highly needed
23	Plot and make entries in graph	4.31	.861	Needed

Cluster Mean 4.58

The data in Table 1 reveal that out of 23 computer skills listed, six (items 5,7,11,15,17 and 23) had mean scores ranging from 4.08 to 4.42 were rated as needed by the respondents while the remaining 13 items (1-4, 6-10,12-14, 16, 18-22) with mean ranging between 4.50 to 4.90 were rated as highly needed. Since the cluster mean was 4.58, it therefore means that OTM students responded generally to all the items as needed for equipping them for self-sustainability and to contribute to national development.



Question Two: What are the Online ICT skills needed by OTM students?

Table 2. Mean Rating and Standard Deviation of Online ICT Skills needed by OTM Students.

S/N	Item Statements	Mean	SD	Decision
1.	Ability to use the internet	4.66	.477	Highly
2.	Ability to send documents via email	4.29	.710	Needed
3.	Browse and download information from net	4.65	.482	Highly
4.	Ability to use local area network	4.65	.515	Highly
5.	Use social networking sites	4.34	.723	Needed
6.	Ability to create web sites	4.16	1.089	Needed
7.	Ability to upload information into the net	4.39	.912	Needed
8.	Ability to chat on line	4.48	.565	Needed
9.	Ability to source information using web engines	4.52	.805	Highly
10.	Ability to make business transactions on line	4.29	.930	Needed
11.	Ability to network with individuals and groups	4.19	.920	Needed
12.	Ability to create web sites for customers	4.02	1.079	Needed
13.	Ability to protect sites from hijackers	3.87	1.194	Needed

Cluster Mean 3.99

The data in Table 2 revealed that out of 13 online ICT skills listed, four (items 1, 3,4 and 9) had mean scores ranging from 4.52 to 4.66 were rated as highly needed by the respondents, while the remaining 9 items (2,5,6,7,8,10,11,12 and 13)with the mean scores ranging between 3.87 to 4.48 were rated as needed. Since the cluster mean was 3.99, it therefore means that, OTM students responded generally to all the items as needed for equipping them for self- sustainability and to contribute positively to national development.

Discussion of findings

The study identified the ICI skills that are needed by Office Technology and Management students for self-sustainability and national development. The mean responses of the respondents on the data presented in table 1 showed that all basic computer skills are needed by students for effective self-sustenance and enabling them to contribute their quota to overall development of the nation. The findings reinforce the view expressed by Etonyeaku, Kanu and Ezeji (2014) that ICT skills should include; word processing skills such as formatting, editing, keyboarding and ability to use the existing software packages among others in their business operations. This shows how important these skills are for successful business enterprise. This finding also is in line with Oborah (2008) who stated that graduates who do not have ICT skills cannot be employed in the present world of work.

Table 2 revealed that the thirteen online ICT skills identified were needed by OTM students for self-sustenance. These findings are in line with OECD (2016) which stated that to seize the benefits of technological change, there is need for specialists who can code, develop applications, manage networks and manage and analyze big data among other skills. These skills enable innovation in a digital



economy to flourish. These findings are also corroborated by the findings in the work of Atakpa (2011), that online ICT skills will enable students acquire critical skills that would enable them to be well prepared for the knowledge economy they will be employed in after graduation. These ICT skills will help students attain economic growth and self-sustainability, improves the quality of lives and contribute to the economy.

Conclusion

Based on the findings of this study, it could be concluded that ICT skills are needed for self-sustainability and lack or absence of these skills can affect graduates in embarking on any business venture. The acquisition of ICT skills would enable the graduates to handle all types of ICT jobs for their customers and thereby empower them economically. The skills could serve both as operational guidelines for those in the business as well as training package for new entrants. The study has provided information on ICT skills that are needed for sustainable business operation. Therefore, OTM students need to combine all the skills identified or listed therein for effective business management upon graduation.

Recommendations

Based on the findings, the following recommendations were made:

1. Office Technology graduates should endeavor to familiarize themselves with all the ICT skills necessary for them to participate in the 21st global workforce.
2. Plateau State government should provide enough funds to equip the polytechnic with relevant ICT resources and connect the laboratories internet for virtual instruction.
3. The institution should organize regular workshops and seminar for lecturers to retool their ICT skills for proper classroom instruction and to keep them abreast of the innovations in the field of technological education.

References

- Abduraman, S, Yahya, T & Suleiman, A. (2014). Promoting sustainable development through information and communication technology in developing countries. *European Journal of Computer Science and Information Technology*, 2(2): 24-29
- Agi U.K & Yellowe N.A. (2013). Management strategies for regenerating secondary education for national development and self-reliance. *Journal of Teacher Perspective (JOTEP)*, 7(2). Association of Nigerian Teachers (ASSONT), Calabar.
- Atakpa, R. A. (2011). Entrepreneurship Education: A sine Qua-non in Business Education in Nigeria. *Business Education Journal* 1 (11), 1-6.
- Chigbuson, A. 1. (2014). Enhancing generic skills through business education for graduates employability in the 21 st Century workplace. *Journal of Business Education*. 2(1):425- 434.
- Ehirheme, P. E. (20 14).Producing a global worker through business education with office technology and management (OTM) in perspective. *Nigeria Journal of Business Education*. 2(1), 221-230.



- Esene, R. A & Mgbonyebi, D. C. (2015). Towards improving the strategies of effective teaching of entrepreneurship development education courses to OTM students of polytechnics in Delta State. *Delta Business Education Journal*. 5(1), 65 - 72.
- Etonyeaku, E.A.C., Kanu, I.A., Ezeji, H.A. and Chukwuma, I.N. (2014) Entrepreneurial skills needs of secretarial education graduates of colleges of education for self- sustainability in Enugu State, Nigeria. *American Journal of Industrial and Business Management*, 4, 601-607
- Nwabuona, E. (2010), *Office technology and management: some issues and solutions. The Scribe, Federal Polytechnic, Oko.*
- Oborah, J. O. (2008). Basic ICT skills and keyboarding for office technology and management Lagos: Adura publishers, Idah.
- Oduwole, T A. (20 15). Youth unemployment and poverty in Nigeria. *International Journal of Sociology and Anthropology Research*, 1(2),23-39
- OECD (2016) Getting skills right, Anticipating and responding to changing skill need. Paris: OECD publishing,
- Oluwalola, F. K. (2010). The place of office technology and management curriculum and information and communication technology in poverty alleviation efforts in Nigeria. *Secretarial Forum Journal for the Promotion and Advancement of Management and Secretarial Profession*. 5, 38 - 52
- Oyinloye O. T and Oluwalola, F. K. (2014). Modern office instructional facilities in office technology and management in Polytechnics: a means to insecurity management in Nigeria. *ABEN Conference Proceedings* 1 (1): 125-133
- Nwanaka, C.R and Amaefule, S (2011) Skills acquisition: Imperative for business studies among secondary schools in Rivers State, *Mediterranean Journal of social sciences*, 2(7), 123- 134
- Udo, M.P (2014). Attitude of vocational business education students towards acquiring maximum vocational business skills and competencies for sustainable development in Nigeria. *Asian Journal of Social Sciences & Humanities*, 3(4), 113-123
- Zuppo, C.M (2016). Defining ICT in e boundary less world. *International Journal of Managing Information technology*, (1):19