ACCOUNTING EDUCATION GRADUATE ICT COMPETENCIES RELATIVE TO TECHNICAL COMPETENCIES: EMPLOYERS' VIEWS ON IMPORTANCE

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Abstract

The study is aimed at examining Employers' view on the desired Accounting Education Graduate Information and Communication Technology Competencies relative to Technical Competencies. The study adopted a descriptive survey design. Two research questions and one hypothesis guided the study. Questionnaire was designed and administered on the sample size of 40 employers of Accounting Education in Warri South Local Government Area of Delta State The data generated were analysed using 4-point scale and z-test. The study revealed that the desired ICT competencies relative to technical competencies for accounting graduates by employers are accounting package, spreadsheet package, word processing package, communication software, presentation software, electronic commerce, world wide web, database management, windows and project management. The study then recommended that there is urgent need to incorporate the desired information and communication competencies of accounting into the curriculum. The curriculum for accounting education should be modified by incorporating ICT for accounting into each of the technical skills so as to enable the lecturers and students to be guided on what is expected. Also, lecturer should be trained on ICT that are relevant to accounting data such as Excel spreadsheet and other accounting data.

Key Words: desired Information and communication technology competencies for accounting education, technical competency and Employers

The business world comprises of employers of labour, entrepreneurs, business mechanisms and information and communication technology. The business environment is continuously experiencing changes in information and communication Technology (ICT) which requires accounting education students to be abraced with ICT

knowledge and skills relative to their profession.   This is necessary as accounting education graduates would need to provide competent and professional services to the organisations they serve.   As such, accounting education should meet the set of skill demands both at recruitment and in their advanced accounting careers (De Villiers, 2010; Kavanagh & Drennan, 2008). An understanding of the specific skills demanded by employers is therefore essential. Accounting Education can be offered at any level; at secondary and tertiary institutions such as colleges of education and universities.

Employers refer to person, group of persons, agency, governmental and and non-governmental institutions that engage the services of people to get a job done for a particular period at a wage or salary rate. The determination of abilities and skills that employers need in order to integrate them into the accounting curriculum is essential for the Nigeria business environment. Consequent on ICT influence on job function of accounting education graduates, a resounding grasp on the application of information systems is a necessity for all accounting educators as well as the students. Seedwell and Muyako, (2015) noted that, what is not clear is the essential skills set required by employers of accounting graduates.

Howieson (2003) opined that, the most important skills will be problem solving, analysis and communication. That there is also, a considerable debate on whether the technological skills (ICT) are being reflected in accounting education? In terms of integration of technological skills to accounting data analysis, Albrecht andSack (2000) in Seedwell and Muyako, (2015) argued that the instruction of accounting has not changed substantially to respond to the requirements of employers.

Stoner (2009) reported on a set of IT skills that were most relevant to accounting students such as the use of spreadsheet, word processing application software, generic PC use (Windows), utilisation of e-mail for communication and the World Wide Web (w.w.w.) for information retrieval, use of statistical and database management applications. There are a host of other IT-related skills such as data communications, presentation software skills, networking, security and control, systems analysis and design, and e-business applications, database software, communications software, project management, presentation software and technology security and control that accountants are expected to know (IFAC, 2003; Stoner, 2009 in Seedwell and Muyako, (2015).

De Lange, Jackling and Gut (2006) observed that despite the use of computer software in accounting courses in some institutions, students still perceived they were not well prepared for the work place. Mohamed and Lashine (2003) contend that globally, employers face different environments across countries and will therefore vary their thinking of the importance of IT skills depending on their circumstances.

A research study carried out by Seedwell and Muyako, (2015) in Swaziland to determine ranking of the IT graduate skills desired by employers, using a five-point Likert scale with 1 representing not important and 5 extremely important in their order of importance. The study revealed that accounting package, spreadsheet package, word-

processing package, and knowledge of communication software (for example outlook) are the five highly rated Information Technology skills needed by employers.

Behn et al. (2012) and IAESB (2013), in responds to the challenges of application of ICT software to technical skills in accounting, accounting academics and practitioners are calling for "comprehensive reforms that are based on a variety of models of accounting education. Competency-development of tomorrow's professional accountants represents one of these models. Competency can be defined briefly as a sufficient capacity to perform some activities and functions for achieving a desired purpose or goal. Competency is viewed as a characteristic of an individual, that is causally related to job performance (Spencer and Spencer,1993 in Hodges and Burchell, 2003). In a workplace context, competency is a combination of cognitive skills (technical knowledge, expertise and abilities), and personal or behavioral characteristics (principles, attitudes, values and motives), which are a function of an individual's personality. Employers expected these competencies would be developed elsewhere in the curriculum and not necessarily through industry involvement (Joseph and Joseph in Burchell, 2003). Competencies pertaining to Technical-competence are: financial reporting and analysis, management accounting and control, income tax accounting, accounting information systems and IT, audit and assurance, enterprise risk management and governance, accounting for nonprofit organizations, and strategic accounting and auditing, corporate finance and financial management, quantitative business analysis and modeling.

Contemporary issues in business and among employers include amongst others are accounting education practices and graduate competency. Currently, of great concern is the ability to apply ICT software packages to desired technical competencies. Such as the use of Excel spreadsheet and Power Point in analyzing, presenting and interpreting pricing decision, investment decision, inventory management and so on. Identifying and developing the important competencies required of accounting graduates is a challenging task for curriculum developers, (Rainsbury, Hodges, Burchell and Lay 2002). The national policy on education explicitly emphasised that the prime function of education programs nation-wide is to prepare students for the workplace by developing generic and specific competencies that educators believe will be useful to employers.

Technology has greatly accelerated the pace and frequency of change not only in business world where the employers operate but also in work life or job experience of accounting graduates. Presentation of accounting is gradually moving into electronic accounting with emphasis on the use of accounting package and spreadsheets. This trend is likely to continue and will require more sophisticated data analysis, data interpretation, data presentation and decision-making in all areas of accounting courses such as cost accounting, budgeting, corporate accounting, financial accounting, management accounting, project evaluation, and so on.

Statement of Problem

It is observed that accounting graduates have advanced in theoretical skills relative to technical skills while the application of information and communication skills and technical skills. The issue of the deficiency of ICT application that are not being met by accounting graduates'in their job performance at the work place has become a source of worry to employers. Some of these employers have resigned themselves to such performance gaps. In order to curb these deficiency by accounting graduates, it becomes necessary to ask what do we really know about employers' views on graduate technical competencies relative to ICT skills? Which of ICT competencies do employers valued most in their order of importance?

Purpose of the study

The present study builds on previous work undertaken of stakeholders' views on business graduate competencies of Hodges and Burchell, (2003) and studies by Seedwell and Muyako (2015). A look at employers' views of accounting education graduates' competencies, this time covering a employers in Warri. Specifically the study tends to:

1.   Determine the competencies desired of accounting graduates by employers.
2.   Ascertain the order of importance placed by employers on accounting graduate competencies desired.

Research Questions

1.   What are the competencies desired of accounting graduates?
2.   What are the orders of importance of the competencies desired?

Hypothesis

There is no significance difference between the mean responses of public and private employers on the ICT competencies relative to technical competencies desired of accounting graduates.

Methodology

A descriptive survey design was used for this study because it was aimed at ascertaining and establishing the status quo, facts of information concerning the population. Survey method is appropriate, especially for seeking individual's opinions, attitudes and perceptions in their natural setting. The population of the study comprised forty employers of accounting education with twenty each from Private and public organizations. The employers were chosen from secondary schools, auditing firms, oil-servicing firms and finance firms in Warri-South Local Government Area of Delta State. The data for this study were collected using a questionnaire developed and titled " Accounting Education Graduate ICT Competencies Relative to Technical Competencies: Employers' Views on Importance". It consists of 24 items developed in

line with the research question. The questionnaire comprised two parts - "A" and "B". Part A is for background information of the respondents and has 4 items while part B covered the research question and hypothesis containing 20 items. The instrument was structured on a 4 point scale of Highly important (HI) – 4 points, important (I) – 3 points, fairly important (FI) – 2 points, Not important (NI) – 1 point. The face and content validity of the questionnaire was done by two experts, one from the Department of Accounting Education and one from the Department of Measurement and Evaluation in College of Education, Warri. To establish the internal consistency of the instrument, a questionnaire was administered to 10 employers in Effurun who are not part of the study. The data collected were subjected to Pearson Moment Correlation Coefficient, a reliability coefficient of 0.78 was obtained. The researcher with the aid of two research assistants trained by the researcher personally distributed the 40 copies of the questionnaire to the respondents. The respondents completed their copies of the questionnaire and returned to the researcher and research assistants on the spot.

The arithmetic mean and standard deviations were used to analyse the data on the research questions. The z-statistical tool was used for testing the hypotheses at 0.05 level of significance. Any item with a mean value between 2.5 and above was regarded as needed competency by the respondents while any item whose mean rating was less than 2.5 was regarded as not needed competency by the respondents. The null hypothesis will be rejected if the calculated value of the z-test (z-cal) is greater than the table value (z-tab). A bar chart of mean of rating of ICT competency will be shown.
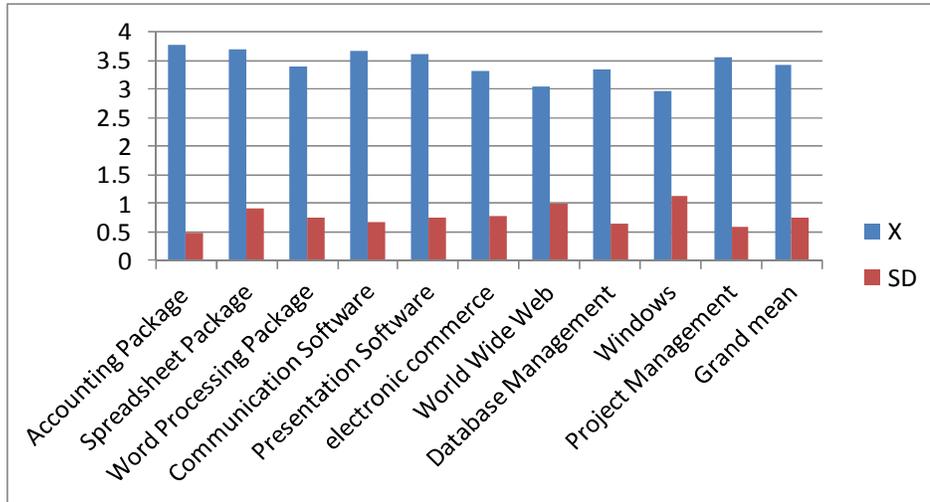
Result and Discussion
Research Question 1: What are the ICT competencies desired of accounting graduates?
Table 1: Mean Rating of Employers on the ICT competencies desired of accounting graduates.

S/N	ICT	X	SD	Remark
1	Accounting Package	3.78	0.48	Desired
2	Spreadsheet Package	3.70	0.90	Desired
3	Word Processing Package	3.4	0.75	Desired
4	Communication Software	3.65	0.66	Desired
5	Presentation Software	3.60	0.74	Desired
6	electronic commerce	3.32	0.79	Desired
7	World Wide Web	3.03	0.99	Desired
8	Database Management	3.33	0.65	Desired
9	Windows	2.95	1.13	Desired
10	Project Management	3.55	0.60	Desired
	Grand mean	**3.43**	**0.76**	**Desired**

Source: Field Survey   Expected mean = 2.5   N = 40

Table 1 shows that item 1 to 10 are the desired ICT competencies desired by employers from account graduates since the individual means scores are above 2.50. Also the average mean of 3.43 is greater than the expected mean of 2.5.

Research Question 2: What are the orders of importance of the competencies desired?

Table 2: Mean Rating of Employers on order of importance ICT competencies desired of

accounting graduates.

S/N	ICT	X	Rank	SD	Remark
1	Accounting Package	3.78	1	0.48	Important
2	Spreadsheet Package	3.70	2	0.90	Important
3	Communication Software	3.65	3	0.66	Important
4	Presentation Software	3.60	4	0.74	Important
5	Project Management	3.55	5	0.60	Important
6	Word Processing Package	3.40	6	0.75	Important
7	Database Management	3.33	7	0.65	Important
8	electronic commerce	3.32	8	0.79	Important
9	World Wide Web	3.03	9	0.99	Important
10	Windows	2.95	10	1.13	Important
	Grand mean	**3.43**		**0.76**	**Desired**

The ranking order is based on the mean scores.

The order of ranking of importance of ICT competencies to technical competencies of accounting graduates by employers' shows showed a high ranking order from item 1 to 9.

Hypothesis: There is no significance difference between the means response of public and private employers on the ICT competencies relative to technical competencies desired of accounting graduates.

Table 3: z-test result of the difference in respondents' mean rating of private and public employers on the desired ICT competencies relative to technical competencies of accounting graduates.

Variable	N	X	SD	Df	z-cal	z-tab	Remark
Private	20	2.95	1.24				
Public	20	3.15	0.79	39	0.63	2.02	NS (Accept Ho)

In Table 3, calculated t-value of 0.63 is less than the t-tabulated value of 2.02 at 39 degree of freedom at 0.05 level of significance. This means that there is no significance difference between the mean response of public and private employers on the desired ICT competencies relative to technical competencies of accounting graduates.

Discussion of Findings

The study assessed the desired ICT competencies relative to technical competencies for accounting graduates by employers. It revealed that accounting package, spreadsheet package, word processing package, communication software, presentation software, electronic commerce, World Wide Web, database management, windows and project management are the desired ICT competencies by employers. In terms of the most important ICT competencies, the study revealed that the ranking order is as follows: accounting packages, spreadsheet package, communication software, presentation software, project management software, word processing package, database management, world wide web and windows outlook. This study is consistent with the studies of Seedwell and Muyako (2015) which revealed that the five most important ICT skills, in order of importance are knowledge of accounting packages, spreadsheet packages, word processing packages, communications software and electronic commerce. It confirmed the view of Stoner (2009) who reported that the set of IT skills that are most relevant to accounting students are the use of spreadsheet, word processing application software, generic PC use (Windows), utilisation of e-mail for communication and the World Wide Web for information retrieval, use of statistical and database management applications. The result of the hypothesis showed that there is no significance difference between the mean response of public and private employers on the desired ICT competencies relative to technical competencies of accounting graduates. The hypothesis that that there is no significance difference between the mean response of public and private

employers on the desired ICT competencies relative to technical competencies of accounting graduates.

Conclusion

The findings of this study is an indication of desired information and communication competencies relative to technical competencies of accounting education graduates by employers. Results indicated that accounting packages, spreadsheet, presentation software, communication software and project management softwares are desired by employers. The study also discovered that there is no significance difference between the mean response of private and public employers on the desired ICT competencies for accounting education graduates.

Recommendation

Based on the findings, the study thus recommended the following:

1. There is urgent need to incorporate the desired information and communication competencies of accounting into the curriculum.
2. A modification of the curriculum by incorporating ICT for accounting into each of the technical skills so as enable the lecturers and students to be guided of what is expected.
3. Lecturers should be trained on ICT that are relevant to accounting data such as Excel spreadsheet and other accounting data.
4. Lecturers should be trained on communication and presentation software so that they will be able to train their students also.
5. High institutions should endeavour to establish ICT laboratory for Accounting Education where computers and the necessary softwares are kept for use by lecturers and students.

Reference

Behn, B., Ezzell, W. F., Murphy, L. A., Rayburn, J. D., Stith, M. T., Strawser, J. R., (2012). The pathways commission on accounting higher education: charting a national strategy for the next generation of accountants. *Issues in Accounting Education*, 27(3), 595-600.

Dave Hodges and Noel Burchell, (2003). Business graduate competencies: employers' views on importance performance. *.Asia-Pacific Journal of Cooperative Education,* 4(2), 16-22

De Villiers, R. (2010). The incorporation of soft skills into accounting curricula: preparing accounting graduatesfor their unpredictable futures. *Meditari Accountancy Research*, 18(2), 1-22.

Forehand, M. (2005). Bloom's taxonomy. Retrieved on 5th September from *http://www4.edumoodle.at/gwk/pluginfile.php/109/mod_resource/content/5/fore hand_bloomschetaxonomie02.pdf*

International Accounting Education Standards Board (IAESB), (2012). International education standard (IES) 2 exposure draft (ED), initial professional development - technical competence. Retrieved on 5th September, from *https://www.ifac.org/sites/default/ files/uploads/IAESB/IAESB.pdf*

International Accounting Education Standards Board Fact Sheet. 2013.

Kavanagh, M. H., & Drennan, L. (2008). What skills and attributes does an accounting graduate need? Evidencefrom student perceptions and employer expectations. *Accounting & Finance*, 48(2), 279-300.

Okoro, J. (2015). Assessment of management competencies possessed by postgraduate university business education students to handle entrepreneurship business challenges in nigeria. *Journal of Education and Practice*, 6(18).

PwC 2013 US CEO Survey: Creating value in uncertain times. Retrieved on 24th August from *http://www.pwc.com/us/en/ceo-survey-us/*

Seedwell, T. and Muyako S., (2015). Information technology knowledge and skills accounting graduates need. *International Journal of Business and Social Science,* 6 (8), 47-52.

Stoner, G. (2009). Accounting Students' IT application skills over a 10-year period. *Accounting Educatio*n, 18(1),7-31.

Tam, T. (2013). What IT knowledge and skills do accounting graduates need? New Zealand *Journal of Applie dBusiness Research*, 11(2), 23-42.

Nishat, A. (2015). Competency approach to accounting education: a global view *. Journal of Finance and Accountancy.*

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