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## Graphic Application Skills Required of Library and Information Science Students for Job Performance in Imo State, Nigeria.

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### **Abstract**

*This study sought to determine the Graphic application skills required of library and information science (LIS) students for job performance in Imo State. A specific objective, research question and a null hypothesis were formulated and used for the study. A descriptive survey research design was adopted for the study. The population comprised 1,200 respondents (i.e. 1,142 students and 58 lecturers), while the sample size of the study comprised 368 respondents (i.e., 310, students and 58 LIS lecturers) selected from higher institutions of learning in Imo State under study. A structured and validated instrument titled “Graphic Application Skills Questionnaire (GASQ)” was used for collection of data for the study. Cronbach Alpha procedure was used to establish the reliability of the instrument and it produced a coefficient of 0.82 which revealed that the instrument is reliable enough to be used for the study. Mean and Improvement Need Index (INI) were used to analyse the responses from the research question, while the null hypothesis was tested using the independent t-test at 0.05 level of significance. The result revealed that Graphic application skills are highly required with positive improvement need index (INI). The Graphic application skills required were statistically significant at .05 alpha levels. Based on the findings, the following recommendations were given among others: that Library and information science students in higher institutions of learning should be made to be aware by their employers on the need to acquire Graphic application skills. Also the Government should provide required resources to enable library and information students acquire the required Graphic application skills.*

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**Keywords:** *Graphic applications, Skills, Library and Information Science, Job performance, Imo State, Nigeria*

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### **Introduction**

Library and information science as a discipline is designed to produce information professionals that will competently serve different stakeholders for development. The graduates of library and information science ought to be empowered through practical, technical and entrepreneurial skills. The graduates-to-be are expected to draw from the various technical well of knowledge and be equipped for job creation. Library and information science graduates need to be given core technical and entrepreneurial training in relation to library and information services so that, on graduation, they can become employable instead of looking for white-collar jobs. In these era where increased, self-employment option has become a necessity.

Etim (2000) defined the library as a place made available to people with such services as the provision of books, periodicals, films, works of art, and other media containing recorded

knowledge as well as reference books and research journals. A school library, on the other hand, may be referred to as the stock of books and other materials such as films, tapes and slides carefully selected to serve the educational needs of the students and the professional needs of the teachers and school administrators.

Different authors such as Akpanuko (2012) and Akpan (2002) emphasized the importance of the school library at all levels of our educational system-primary, secondary and tertiary institutions. For instances, the school library offers the students the opportunity to learn how to find out, discover and discriminate the messages, graphic or otherwise, that they receive in the classroom. Akpanuko (2012) asserted that a school library should serve as an instructional centre, a learning resources centre and a multimedia centre. A school library therefore, is a place that provides educational services in schools which help students to develop reading skills and acquire information and knowledge. The basic resources required in the library and/or resources centre as suggested by Umoh and Oden (2001) include volumes of up-to-date books, journals, magazines, non-book media materials (films, slides, tapes), educational instructional materials and play materials. Other equipment such as visual aids (projected and none projected) aural/auditory aids and audio-visual aids are also required to be part of the library resources.

Graphics applications is a software package which allows its user to produce graphic and drawings, such as logo, graphs and charts for the presentation of items in meetings. Ubani (2008) observed that Microsoft graphics package can be used to produce perfectly proportioned, accurate and neat drawings in few minutes which also depend on the ability of the user. Olufemi, Chukwu, Quadril and Madinat (2013) stated that the graphic package refers to any computer software or programme that makes a computer capable of drawing, displaying and manipulating pictures. They also stressed that the term graphic is used to refer to the images themselves. West (2016) stated that Microsoft graphics gives the user the ability to make reports and other presentations more effectively through the use of analytical graphics, common graph forms that make numerical information easier to understand and presentation graphics that can dress up graphs programs include PC pain bush, illustrator, cricket draw, coral draw, print master, print shop, Microsoft PowerPoint and Harvard graphics.

The student utilises printers and plotters as an electronic device to present graphs which may be required in higher institutions of learning. Printers and plotter enable computer systems to showcase picture that would be necessary for the smooth running of the organizational activities. The Microsoft graphics showcase the required academic pictures with the enablement of the printed circuit board which allows the computers to showcase pictures that may be needed by the organization. The student can also use graphic Microsoft to display pictures such as school admission advertisement, conferences, memoranda, invents and printing of materials.

Nevertheless, the effectiveness and efficient of Libraries in the higher institutions of Learning is determined by the effectiveness of the librarian which can be achieved faster with the utilization of information systems in the Libraries. Graphics application skills package is a package used for the production of graphics and drawings, such as logo, simple graphs etc. compare to the rigors in manual drawing design, graphic applications can be used to produce a perfect, decent drawings in a couple of minutes which may enhance the activities of an organization. Ubani (2008) stated that Microsoft graphics packages enable users to combine

variety of visual objects and text to create attractive and highly stylized images for slide shows and reports (messages) presentation to an audience.

### **Statement of the Problem**

Most Libraries in higher institutions in Imo State have been equipped with information and Technology facilities for effective job performance. The Libraries have been equipped by both State and Federal Governments in order to facilitate the process and usage of Libraries in schools. Both State and Federal governments across the country have invested hugely in the procurement and maintenance of technologies used for information collection, processing, maintenance, storage and dissemination in Libraries in Imo State. As a result, there is virtually no libraries in higher institutions in Imo State today that does not have one form of computer system or the other as well as networking cables or wireless connection. However, despite these provisions, the researcher observed that many of the computers in most Libraries in Imo State are just there without being put to functional use and where it is being used, only typing of textual documents are done with it. Most times, graphic application is neglected and often times the official documents are taken to commercial business centres for production. This indicated the level of incapacitation of such Library and Information graduate. Most Library and Information graduates in public offices seem not to be trained, most of them seem to lack the basic skills for utilizing the graphic application for effective job performance. In the same vein, most of the LIS certified graduates find it difficult to utilize and apply Graphic Application skills in their various offices. All these indicate lack of adequate training of LIS graduates. If these problems are to be resolved, there is need for the LIS students to acquire Graphic application skills for job performance towards their future offices.

### **Research Question**

1. What is the Graphics application skills required of library and information science students for job performance in Imo State?

### **Research Hypothesis**

1. There is no significant difference in the Mean responses of library and information science students on the availability of Graphics application skills required of library and information science students in Imo State.

### **Literature Review**

Graphic application designers utilize computer software to create visual concepts as to disseminate ideas that inspire, inform, or captivate consumers. Ubani and Ezekwa (2017) defined graphics package as a computer software or programme that can be used to create and manipulate images using a computer system. Graphic application is designed to be utilized for advertisements, brochure, websites, books and magazines. Graphics packages are generally made especially for art works

According to Nwosu, Anaka, Eleoba, (2015), there are two types of graphics packages and they are as follows;

**Painting package:** Painting package produces image by changing the colour of pixel on the screen. These are coded as a pattern of bits to create a bitmapped graphics which are used for images such as scanned photographs or picture taken with a digital camera.

**Drawing Package:** Graphic drawing package is a programme that produces images that are made up from colours with shapes such as circle, square and rectangle.

According to Nwosu, et al, the two types of graphic packages if acquired by Library and information science students enhance their job performance in any office after graduation. Library and Information Science students are expected to acquire these graphics skills so as to enable them effectively carry out their library and other job performances.

Ubani et al (2017) observed that computer graphic package are extremely fast, able to redo work shortly all over again. The stated that furthermore, graphic packages are used to create, edit, display and paint graphic images as well as design letter head paper, cards, banners, complimentary cards, wedding cards, identification cards and logo.

West (2016) Stated the graphics gives the user the ability to make reports and other presentations more effective through the use of analytical graphics, common graphs forms that make numerical information easier to understand, and presentations graphics programmes that can dress up graphs and use free form drawings. Also, popular graphics programmes which include PC paintbrush, illustrator, persuasions, cricket draw, Corel Draw, Paint Master and Print Shop. Laudon and Laudon (2013) Observed that graphic Language retrieve data from files or databases and display them in graphic format. Some graphic software can perform arithmetic or logical operations on data as well.

Ubani (2008) posited that the presentation graphics packages provide predefined background and sample page layouts to assist in creation of complete computer-driven slide shows, which is a combination of a data projector that can be used to present any kind of report (e.g. business report, educational report, report at conference) to an audience. The slide show has to do with a collection of pages arranged in sequence that contains text or images which can be displayed on the screen one after the other. Each page displayed can be accompanied with or without a specific sound (music). Displaying from one page to another can be done manually by pressing a keyboard or automatically by the computer itself. Presentation graphic application package is expected to be used by secretaries in presentation of information in text, graphs, and diagram or in picture form to people (audience). They are excellent tools for communicating message and to persuade people. Most administrative staff in a variety of setting and situations use presentation graphics programmes to make their presentation more interesting and professional. The Library and information science students utilize the graphics to present administrative strategies and to display the needed graphic logos. With presentation graphic applications, the secretary can create any kind of graphic chat based on the data from an electronic spread sheet or a database form, business presentation as well as educational presentation or report.

Corel Draw as an aspect of Microsoft is a graphic application skill with application windows. It is the best graphic software and it is a flexible software application with many features which enhances artistic design and desktop publishing work. Osuagwu, Omuodu and Ugwu (2008) stated that knowing CorelDraw will make every job one does easier. Graphics package is one of the skills expected of Library and Information science students to acquire for effective performance of duties. The acquisition of Graphics skills will enhance their job performance.

### **Methodology**

The descriptive survey research design was employed for this study. The survey research design was employed because; the study attempted to elicit the opinions of library and information science students Survey design according to Ekong (2000) is employed when information is gathered from a sample of relevant population who are familiar with the ideas needed for a purpose. This study was carried out in Imo State of Nigeria. The population for

this study comprised 1,142 students from Imo State University, Avan Ikoku College of Education and Federal University of Technology, Owerri, while the sample size of the study comprised 368 respondents selected from the afore-stated higher institutions of learning in Imo State. The population and Sample size made up of library and information science students from higher institutions in Imo State was used for the study. The researcher developed instrument titled “Graphic Application Skills Questionnaire (GASQ)” used for collection of information from the respondents. The instrument was subjected to face-validation by three experts. To determine the reliability of the instrument, Cronbach’s Alpha test was used to test the internal consistency of the instrument items. The test yielded a coefficient index of 0.82 which was deemed reliable. The copies of questionnaire were administered to the respondents by the researcher with the help of two research assistants. The research assistants were briefed on the procedures for administration and collection of the instrument from the respondents. The data collected were analysed using Mean and Improvement Need Index (INI) to answer the research questions, the weighted Mean for application skills need of Library and Information students was represented by ( $x_1$ ) while the weighted Mean of the job performance was represented by ( $x_2$ ). The difference between the two Mean ( $\bar{x}$ ), that is, ( $x_1-x_2$ ) was determined to indicate the performance gap (PG), which yielded a positive or a negative value. The null hypotheses were tested using the independent t-test at 0.05 level of significance.

## Results

### Research Question 1

What is the Graphics application skills required of library and information science students for job performance in Imo State?

**Table 1: Mean and INI on Graphics Application Skills Need of LIS students for Job Performance**

S/N	Items	$\bar{X}_1$	$\bar{X}_2$	$\bar{X}_1 - \bar{X}_2$ (INI)	Remark
1	Skills for drawing	1.82	1.76	0.6	Required
2	Skills in manipulating pictures	1.87	1.84	0.3	Required
3	Ability to create signs	1.68	1.66	.02	Required
4	Ability to create animation	2.72	2.76	-.04	Not Required
5	Skills in manipulating symbols	2.88	2.66	.22	Required
6	Ability to manipulate images	2.87	2.84	.43	Required
7	Ability to create graphic identities	2.68	2.34	.34	Required
	<b>Cluster Mean</b>	<b>2.36</b>	<b>2.27</b>	<b>.25</b>	<b>Required</b>

### Researcher’s Field Survey, 2018

Data in Table 1 revealed the Mean ratings of library and information science students, the Mean performance of library and information science students on graphics application skills and INI for these skills. The INI for these skills are positive except on ability to create animation which has a negative index of - .04; which means that the level of library and information science students’ performance exceeds the skill required for the application. But with the cluster mean INI of .25 there is need to improve upon the skills for the library and information science students to perform optimally.

### Hypothesis 1

There is no significant difference in the Mean responses of library and information science students on Graphics application skills required of library and information science students in Imo State.

**Table 2: The t-statistic testing the difference between the Mean responses of library and information science students on graphics application skills needs of library and information science students**

S/N	Items	$\bar{X}_1$	$\bar{X}_2$	SD <sub>1</sub>	SD <sub>2</sub>	t-cal	t-crit	Decision
1	Skills for drawing object	1.82	1.76	1.62	2.84	.86	1.96	NS
2	Skills in manipulating pictures	1.87	1.84	1.12	1.84	.43	1.96	NS
3	Ability to create signs	1.68	1.66	.46	.86	1.33	1.96	NS
4	Ability to create animation	2.72	2.76	1.11	2.16	-1.74	1.96	NS
5	Skills in manipulating symbols	2.88	2.66	2.11	1.16	1.10	1.96	NS
6	Ability to manipulating images	1.87	1.84	1.12	1.54	1.43	1.96	NS
7	Ability to create graphic identities	2.68	2.84	2.06	5.16	8.23	1.96	NS
<b>Cluster Mean</b>						<b>1.66</b>	<b>1.96</b>	<b>NS</b>

**NS = Not Significant at 0,05 alpha level and df =366**

Data in above state table showed the t-statistic testing the difference between the Mean responses of library and information science students on the graphic application skills need of LIS students for job performance. The test showed that the calculated t-values are less than t-critical of 1.96 at 0.05 level of significance at 366 degree of freedom. Therefore, the null hypothesis tested was accepted.

### Discussion of the Findings

The result of the study revealed that Graphic applications skills of library and information science students are highly needed for job performance, it shows a positive INI and the need is statistically significant at .05 alpha levels. This result is influenced by the fact that library and information science students use graphic Microsoft to display pictures such as advertisement, conferences, memoranda, events, printing of materials in their libraries.

This result is supported the findings of Ubani (2008) stating that library and information science students required graphic skills to enable them combine variety of visual objects and text to create attractive and highly stylized images for slide shows and reports (messages) presentation to an audience. The result also supported the findings of Owens (2011) that variety of skills are required in graphic application by library and information science students to perform such tasks as presentation of information in text, graphs, diagram or in picture form to people. Graphic application skill packages is needed for production of graphics and drawing such as logo, simple graphics etc. Osuagwu, Omuodu and Ugwu (2008) stressed that the knowledge and skills of CorelDraw and other aspects of graphic application would enhance library and information science students job performance. Graphic application skill packages are needed for production of graphics and drawing such as logo, simple graphics etc. Osuagwu, Omuodu and Ugwu (2008) stressed that the knowledge and skills of CorelDraw and other aspects of graphic application would enhance library and information science students job performance.

### Conclusions

Graphics application is application software that runs on windows. It is a set of programme which enables library and information science students and information managers to

manipulate graphics images by the use of information systems. Ubani (2008) stated that Microsoft graphics are software packages which are used to produce graphics and drawings, ranging from graphs and logos to complex drawings. Ubani also maintained that graphics software provides predefined background and sample page to assist in the creation of complete computer-driven slide shows, which in combination with a data projector can be used to present any kind of report. Library and Information Science students are expected to acquire and utilize Graphic Application skills to enable them effectively carry out their duties in any electronically equipped office.

### Recommendations

Based on the findings of the study, the following recommendations are made:

1. Employers of LIS graduates in the public service should be given awareness on the need to train their employees on Graphics application skills in order to keep them abreast of new features of updated versions. This will enable them know the importance of the Graphics application skills in their career development.
2. Training institutions should develop programmes that would assist secretaries update their Graphic application skills at convenient time and space.
3. Management of academic institutions and curriculum planners should collaborate with employers of labour to identify graphic application skills needed by secretaries from time to time as technology advances. This will ensure continuous curriculum reforms in Library and Information Science.
4. Federal and State governments should come out with policies that will ensure standards in the training and employment of LIS students for the public sector of the economy, especially as it relates to Graphics application skills acquisition.

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