Influence of level of study on information literacy skills of undergraduate students in Nasarawa State University, KEFFI

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Abstract

A high degree of essential information literacy skills and experience in information handling and in effective independent learning among students have become apparent. However, the determinants of their art of navigating the world of information available to them are unclear. It is therefore, imperative to identify those essential determinants that influence the information literacy skills of the undergraduate students. The study used descriptive survey design, which aims at determining the influence of level of study on information literacy skills Possessed by undergraduate students in Nasarawa State University, Keffi. One thousand students were sampled from the population for the study. One research question which was raised to guide the study was subsumed in a hypothesis. Questionnaire was used to collect the data which were analysed using mean and standard deviation while t-test statistic and ANOVA was used to test the hypothesis at 0.05 level of significance. The outcome of the findings revealed that level of study significantly influences the information literacy skills of undergraduate students in Nasarawa State University, Keffi.

Keywords: Information, Information Literacy, Information Literacy Skills, Literacy skills

Introduction

Information literacy skills and the roles they play in the academic achievement and lifelong learning of undergraduate students has become increasingly important in the contemporary environment of rapid technological change and proliferating information resources. Correspondingly, a high degree of essential information literacy skills and experience in information handling and in effective independent learning among students have become apparent. However, the determinants of their art of navigating the world of information available to them are unclear. It is therefore; imperative to identify those essential determinants that influence the information literacy skills of the undergraduate students in order to establish what affect their information literacy level and consequently, their academic performance and their abilities as informed citizens of the information society to participate intelligently and actively in the society. Accordingly, Rockman (2004) ascertains that it is in the best interest of the students, especially those in universities to identify the determinants of their art of exploring the globe of information accessible to them. Similarly, undergraduate students in Nasarawa State University, Keffi, need to be aware of the factors that influence their high degree of information literacy skills which have successfully made them to meet the rigorous requirements of their academic programs and subsequently become competitive in the world market. They require knowing the variables that significantly influence their information literacy skills in order to use them to effectively find, organize, evaluate, effectively use and to communicate information to address specific problems.

Level of study is a gradual progression, which the undergraduate students pass through in universities. It is characterised by having analytical and critical ability to formulate research questions, evaluate results, and skills to search for and access to a variety of information resources in order to meet information needs (Aguolu, 2006). In line with the above reasoning, Rock(2006) maintained that no individual could developed mentally, psychologically and socially above his/ her level of education, which is a determinant factor in every aspect of human development. He further contended that new entrants into the universities would certainly lack information literacy skills when entering the universities. The above viewpoint suggests that information literacy skills could be developed as individual progresses from one level of study to another. Against this backdrop, the paper examined the extent of influence of level of study on the information literacy skills of the undergraduate students in Nasarawa State University, Keffi.

Theoretical framework
Constructivist Theory of Information Literacy by Jean Piaget: The understanding of information literacy and the different theories about Information literacy have changed and developed over time. As with anything, there are many theories, but Piaget considers the constructivist theory as one of the main theories. This theory states that learning is the modification of a student's schemata. Schemata are the structures in the brain that are used to organize things; like filing cabinets. Schemata organize information by attaching it to prior knowledge. Due to how schemata work, it is important to connect learning experiences to other ones, and draw upon any previous experiences of the person

you are trying to teach something to. Children, according to the theory, there are active and motivated thinkers. They enjoy learning and thinking about new ideas.

The theory also focuses on interactive theory, which talks about what a person does while reading. According to the theory reading should be focused on comprehension. It believes that reading has no point if you do not understand and think about the material presented to you, be it research or a silly story. Meaning is constructed thought schemata as well as the information in the text. During reading, process take place at the same time; interacting with each other (hence the interactive theory). Children notice both the individual letters on the page while grouping them into the word, while making meaning in the brain. Children do not do one, then the other, neither then the next; nor do they use the background knowledge in the brain to examine the words then the letters. Word identification skills and comprehension strategies take place simultaneously. Constructivist theory of literacy is of paramount importance to this study because it helps to unveil the existing theories of literacy and thereby giving the study a sound theoretical base upon which it hopes to stand. In addition, its emphasis on the process of organization of information and reading with comprehension helps in-depth understanding of information literacy.

Conceptual Framework

Concept of Information literacy and Information Literacy Skills: Attempts to define information literacy have been made for several years, mostly by librarians and professionals related to library science, therefore many definitions of information literacy abound, but all incorporated similar ideas. One classic and the most commonly cited and used information literacy definition is the one adopted by the American Library Association (ALA, 1998:8). According to the definition, "To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information." Ultimately, information literate people are those who have learned how to learn. They know how to learn because they know how information is organized, how to find information and how to use information in such a way that others can learn from them. They are people prepared for lifelong learning because they always find the information needed for any task or decision at hand (Bruce, 2006). The diagram below reflects the concept of information literacy.

**Schematic diagram of the essential concepts of the study**
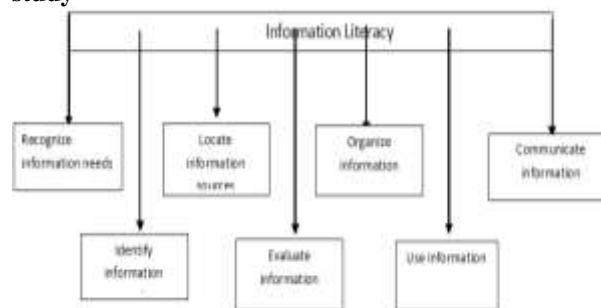
(Source: Ode 2014)

The diagram depicts that information literacy constitutes the ability to: recognize when information is needed, be able to identify information needs of the people, and locate appropriate sources of information. It further demonstrates that information literacy involves critically evaluating information, organizing information in appropriate manner, effectively using information and being able to communicate or disseminate the information in their various formats to meet the information needs of the people. Thus, the diagram is a detail explanation of the concept of information literacy.

On the other hand, Information literacy skills according to Miller (2005) are closely related terms to information literacy, which has been interchangeably used to mean information literacy. Information literacy skills though interwoven with information literacy are distinct. According to the American Library Association: Presidential Committee on Information Literacy (2002:10) "information literacy skills are an umbrella term incorporating library skills, media skills, research skills, ethical skills, learning skills, study skills, communication skills, ICT skills and critical thinking skills that an informed citizen of the information society ought to possess in order to participate intelligently and actively in the society". According to this concept, information literacy skills are goals that can be attained through a process that relies on the continuous learning of specific and evolving behaviors. One needs to be able to locate and access information in all its forms to solve information problems through enlisting a set of behaviors that develop competencies in the techniques and skills necessary to survive in the information Age. Accordingly, Bruce (2006) maintains that information literacy skills, as an educational goal is a cluster of abilities that an individual can employ to cope with, and to take advantage of the unprecedented amount of information, which surrounds us in our daily lives and work. Information literacy skills are therefore, sets of competencies that an informed citizen of the information society ought to possess in order to participate intelligently and actively in the society.

The diagram below gives detail explanation of the concept of information literacy skills.
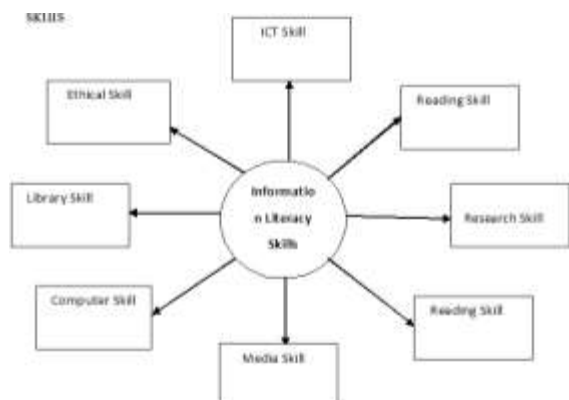
(Source: Ode 2014)

Similarly, the diagram above gives the true description of the most common phrase 'information literacy skills' concept. Information literacy skills as shown above are an umbrella term incorporating media skills, literacy skills, ethical skills, computer skills, reading skills, library skills, study skills, research skills, ICT skills, critical thinking skills etc. that an informed citizen of the information society ought to possess in order to participate intelligently and actively in a society. The diagram further indicates that the concept, 'information literacy skills' are goals that can be attained through a process that relies on the continuous learning of specific and evolving behaviors.

Purpose of the Study: The general aim of this research study is to determine the extent of influence of level of study on the information literacy skills possessed by the undergraduate students in Nasarawa State University, Keffi**.**

Research Question: What is the extent of influence of level of study on the information literacy skills possessed by the undergraduate students in Nasarawa State University, Keffi?

Significance of the Study: This study which is concerned with finding out the extent of influence of level of study on information literacy skills of undergraduate students in Nasarawa State University, is bound to be of immense benefits to students and staff in the university system, university authorities, media and information technologists, educational stakeholders, especially the Federal and State Ministries of Education, as well as the National Universities' Commission (NUC). Specifically, the study will be of immense benefit because it will: Provide the

undergraduate students with a framework for gaining control over the complexity of information and how they interact with information in their environment, and sensitize them on the need to develop information literacy skills thereby making them conscious of the explicit actions required for gathering, analyzing, and using information. The study will be useful to a range of students to become information literate and thus be able to find, evaluate, and use information effectively for lifelong learning and problem solving. Create awareness on the need to include information literacy as a core learning ability in the curricula of the universities and impress upon the FME and NUC as policy makers in the universities to provide explicit strategy for information literacy development in Nigerian universities. The findings will further help to reveal and create awareness among the university authorities of the importance or otherwise of development of information literacy skills by undergraduate students in the universities in Nigeria. This is because the findings from this study may require a decision by the university authorities whether to develop and sustain information literacy programme in universities' learning curriculum or to modify, expunge or discontinue with the existing information literacy programme.

Findings from the study will help to sensitize media and information technologists/professionals, librarians and academic staff in universities of their important roles in promoting students' information literacy skills. This is because it will provide a basis for them to understand the need for their complimentary roles in encouraging and supporting the development of information literacy by the undergraduate students.

This study will add to the existing literature in library and information science because the findings of the study will provide theoretical and empirical evidences on the information literacy skills of undergraduate students in Library and Information Science thereby laying a foundation for further research in library and information science**.**

Analysis
Research Question: What is the extent of influence of level of study on information literacy skills of undergraduate students in Nasarawa State University, Keffi?

To answer the research question, data relating to influence of level of study on information literacy skills is analysed. The analysed result is presented on the table below

Table: Mean and Standard Deviation of the responses on the extent of influence of level of study on information literacy skills of undergraduate students in Nasarawa State University, Keffi

S/N	Item	Level	N	Mean	Std. Deviation
18.	One's level of study can influence his/her information literacy skills	100 level	246	3.65	.51994
		200 level	251	3.65	.51048
		300 level	253	3.64	.52699
		400 level	250	3.64	.51436
		Total	1000	3.64	.51723
19.	100 level Students lack information literacy skills when entering the university	100 level	246	3.70	.49043
		200 level	251	3.69	.50650
		300 level	253	3.69	.50526
		400 level	250	3.68	.50712
		Total	1000	3.69	.50177
20.	I find information seeking process in my 300 level easier than in my 200 level	100 level	246	3.46	.82067
		200 level	251	3.39	.84791
		300 level	253	3.51	.76946
		400 level	250	3.38	.88071
		Total	1000	3.43	.83102
21.	I am more skilful in information seeking process in my 400 level than in 300 level	100 lesvel	246	3.28	.93722
		200 level	251	3.19	.96630
		300 level	253	3.39	.85973
		400 level	250	3.17	.99989
		Total	1000	3.26	.94463
22.	One develops information literacy skills as he/she progresses in his/her study	100 level	246	3.32	.92861
		200 level	251	3.26	.97094
		300 level	253	3.45	.81317
		400 level	250	3.14	1.06303
		Total	1000	3.29	.95331
	Overall effect of level of study on information literacy skills	100 level	246	3.48	.49572
		200 level	251	3.44	.52219
		300 level	253	3.54	.44798
		400 level	250	3.40	.56055
		Total	1000	3.46	.50997

Key:
N= Number of respondents
X= Mean
SD= Standard Deviation

The table above shows that all the items on the levels of study have their mean scores rating above 2.5 therefore, they are all statistically acceptable. On the overall summary, 246 one hundred level students have their mean rating score of 3.48 with standard deviation of 0.50, 251 two hundred level students had mean rating score of 3.44 with standard deviation of 0.52, 253 three hundred level students has mean rating score of 3.53 with SD of 0.44 and four hundred level students has mean rating score of 3.40 with SD 0.56. It can therefore be seen that all the levels have significant information literacy skills. However, 300 level has the highest followed by 200 level and lastly by 400 level. The research question can therefore, be answered that

level of study has some significant influences on information literacy skills as there are variations in their mean scores of their information literacy skills.

In order to further investigate the influence of level of study on information literacy skills of undergraduate students, hypothesis three is tested below.

Hypothesis Three: There is no significant mean difference among undergraduate students' level of study in their information literacy skills.

To test the hypothesis, the items in the instrument relating to influence of level of study on information literacy skills were analysed using t-test. The analysed result is presented below

Table: ANOVA analysis on mean difference among level of study of undergraduate students in their information literacy skills

S/N		Sum of Squares	df	Mean Square	F	Sig.	Remarks
1. One's level of study can influence his/ her information literacy skills	Between Groups	.025	3	.008	.031	.993	NS
	Within Groups	267.239	996	.268			
	Total	267.264	999				
2.100 level Students lack information literacy skills when entering the university	Between Groups	.089	3	.030	.117	.950	NS
	Within Groups	251.430	996	.252			
	Total	251.519	999				
3.I find information seeking process in my 300 level easier than in my 200 level	Between Groups	2.821	3	.940	1.363	.253	NS
	Within Groups	687.083	996	.690			
	Total	689.904	999				
4.I am more skilful in information seeking process in my 400 level than in 300 level	Between Groups	7.594	3	2.531	2.852	.036	S
	Within Groups	883.842	996	.887			
	Total	891.436	999				
5.One develops information literacy skills as he/she progresses in his/her study	Between Groups	12.942	3	4.314	4.801	.003	S
	Within Groups	894.958	996	.899			
	Total	907.900	999				
Effect of level of study on information literacy skills	Between Groups	2.619	3	.873	3.381	.018	NS
	Within Groups	257.190	996	.258			
	Total	259.810	999				

Key:
S= significant
Ns =Not significant
N= Number of respondents
X= Mean
SD= Standard Deviation
Df=Degree of frequency

From the table above, the individual items ANOVA for all the groups is analysed. The sig value for taking decision for all the items are greater than 0.05. This means that opinions of all the level of study are similar except items 4 and 5. This means that opinions of the respondents are similar on all the aspects of items in the questionnaire addressing information literacy skills except the respondents' opinions on '**I am more skillful in information seeking process in my 400 level than in 300 level and One develops information literacy skills as he/she progresses in his/her study**'. The overall information literacy analysed showed that f is3.381 and sig value is 0.018; this is greater than 0.05 so the difference is not significant and therefore, the hypothesis is accepted with the conclusions that there is no significant mean difference among undergraduate students' level of study in their information literacy skills.

Discussion

The Research Question intended to establish if level of study of the undergraduate students influences their information literacy skills. The research findings indicated that level of study of an individual to a large extent determines his/her information literacy skills. It further revealed that 100 level students lack information literacy skills when entering the university. This is because they lack exposure to library resources, electronic and print information resources from their secondary schools, which are catalysts in determining

the information literacy skills; hence they are deficient in information literacy skills. The findings further revealed that 300 level students find information seeking processes easier in their 300 level of study than in their 200 levels. This implies that information literacy skills are developed as the students progresses in their course of study. Corroborating the above, the outcome of the study conducted by Roth (2006) on determinants of information literacy revealed that no individual could develop mentally, psychologically and socially above his/her level of education, which is a determinant factor in every aspects of human development. Equally, the result of the findings by Volman & Van Ech(2001) on level of study and information literacy skills revealed among other things that there is enough evidence to prove that level of study positively influences the information literacy skills possessed by the undergraduate students. The findings further showed that new intakes into the university lack information literacy skills when entering the university but develop the skills as they progress in their study. However, the hypothesis which maintains that there is no significant mean difference among level of study of the undergraduate students in their information literacy skills differs from the above results of the findings, implying that level of study does not play significant role in influencing the information literacy skills of the undergraduate students.

Conclusion/ Recommendations

Based on the findings of the study on the influence of information literacy of the undergraduate students in Nasarawa State University, the following recommendations are imperative.

- Awareness of importance of information literacy is required at all levels but especially at the university level as the undergraduate students need to achieve a high degree of information literacy skills to successfully meet the rigorous requirements of their degree programs and subsequently become competitive in the world market.

- An explicit strategy for information literacy development is required so that all staff (academic and non- academic) is aware of what should be done and who should do it.

- Academics acceptance of their role in promoting students' information literacy skills is important and collaboration between library staff and academic staff is important in ensuring that students receive support and guidance they need.

- Integration of information literacy skills training as a core learning ability and competency into the curriculum programme is required as it will raise its value in the eyes of students.

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