SELF-EFFICACY AS A PREDICTOR OF INFORMATION LITERACY SKILLS OF TECHNICAL COLLEGE STUDENTS IN NIGERIA

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Abstract
Information literacy skills help students for life-long learning. The study investigated self-efficacy as predictor of information literacy skills of students in Government Technical Colleges in South-south Nigeria. The main objective of the study was to find the level of self-efficacy of the students and to what extent self-efficacy predicts information literacy skills. Descriptive survey method was used. A structured questionnaire was used for data collection from a study populationofs 660. The result showed a significant relationship between self-efficacy and information literacy skills. The study recommended the incorporation of information literacy skills as part of the school curriculum and the introduction of activities to boost the self-efficacy of students. Also, student information literacy training and activities should be introduced early.

Keyword: *Information literacy skills, Self-efficacy, Students*

Introduction

Information literacy is the ability to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information (American Library Association Presidential Committee on Information Literacy, 1989). This is regarded as the basis for life-long learning. Jullen (2002) reported that information literacy is the ability to make efficient and effective use of information sources and

that an information literate student today should possess specific online search skills that incorporate the ability to select appropriate search terminology, construct a logical search strategy and evaluate the needed information appropriately.

Information literacy is a crucial skill desperately needed by students in Government Technical Colleges to pursue basic education to function in information-driven society. Students should be able to recognize when information is needed, to locate the information source, to evaluate the credibility of the source and the various formats of the information. The abundance of information in various formats in this information explosion era is of little help but pains to students of Government Technical Colleges who have not learned how to use information effectively.

In the age of information explosion, information has assumed a new dimension as a critical factor of production, socialization and education especially with the emerging social media platforms. Technical College students are regarded as digital natives and need to process information in the learning environment in order to perform well in school and to become better citizens. To participate in the socio-cultural activities in the society, students need information literacy skills. They need to identify the need for information, the source, credibility and utilization of that information, and to manage the volume of information effectively at their disposal, in view of the fact that all things are mediated. A lack of of the needed or inadequate information literacy skills has placed Technical College students in a difficult situation and they find it impossible to do well in school and society.

Studies on information literacy skills among students in Government Technical Colleges in South-south Nigeria are lacking. Therefore, this study investigated how self-efficacy predicts information skills of Government Technical College students in South-south Nigeria.

Literature review

The phrase, information literacy, first appeared in print in a 1974 report written on behalf of the National Commission on Libraries and

Information Science by Paul G. Zurkowski who was at the time the President of the Information Industry Association. Zurkwosjki used the phrase to describe the techniques and skills learned by the Information literate student. This is for the utilizing of a wide range of information tools as well as primary sources in molding information solutions to their problems. The key concept in information literacy is the impact of information in the society in view of new skills. Other educational goals, including traditional literacy, computer literacy, library skills and critical thinking skills, are related to information literacy skills.

AL-Issa (2003) described information literacy as a process that influences the development of information literacy skills, documentation and expectations. The study was conducted with 24 female and male students attending a private school and a public school in Kwait. The study recommended further research on a larger scale locally and regionally to really assess students' levels and understanding of information literacy as other standards in order to design effective holistic approach in literacy instruction.

In 2003, the National Forum of Information Literacy together with United Nation Educational and Scientific Organisation (UNESCO) and the National Commission on Library and Information Science sponsored an international conference in Prague with representatives from twenty-three countries to discuss the importance of information within a global context. The Prague Declaration described information literacy as a key, social, cultural and economic development of nations and communities, institutions and individuals in the 21st century and declared its acquisition as part of the basic human right of life-long learning. The Alexandra proclamation also linked Information literacy with life-long learning and also set information literacy as a basic human right to promote inclusion of all nations.

On May 28, 2009, United States, California Governor, Anold Schwar Zenegger, signed an executive order 5-06-09, establishing a California ICT Digital Literacy Leadership Council, which in turn, was directed to establish an ICT Digital Literacy Advisory Committee. The executive order further states "ICT Digital Literacy is defined as using digital technology, communication tools and/or networks to access,

manage, integrate, evaluate, create and communicate information in order to function in a knowledge-based economy and society. The Governor further directed all concerned authorities, schools, higher education employers, work force training agencies, local governments, communities, organisations and civic leaders to advance California as a global leader in ICT Digital literacy.

Ultimately, information literate students are those who have learned the basic rudiments of how to seek information, where to find information, confirm the source and the information as credible and use it. These students know how to learn because they know how knowledge is organized, how to find information and how to use such information in such a way that others can learn from them. Such students could be regarded as those prepared for life-long learning because they can find information needed for any task or decision at hand.

To underscore the importance of information literacy in a modern society, the International Federation of Literacy Association and Institutions (IFLA) has established an Information Literacy Section. This section has, in turn, developed and mounted an Information Literacy Resources Directory called InfoLit Global. Librarians, educators and information professionals may self-register and upload information literacy related materials. According to the (IFLA) website, the primary purpose of the Information Literacy Section is to foster international co-operation in the development of information literacy education in all types of library and information institutions.

Another conception of Information Literacy Skills is used primarily in the library and information studies fields and this conception, as rooted in library instructions and bibliographic instruction, is the ability to recognize when information is needed and to have the ability to locate, evaluate and use effectively the needed information. In this view, information literacy becomes the basis for life-long learning. It is also the basis for evaluating contemporary sources of information. This is in view of the fact that everything is mediated using various forms of information content that determines the method of dissemination.

Tang and Tseng (2013) reported that students with high self-efficacy demonstrated superior knowledge of digital resources selection and use. Self-efficacy is one of the concepts under social learning theory of Bundura (1986, 1987) which postulates that human achievement depends largely on interactions between one's behaviour, personal factor (example thought, beliefs and environmental conditions. This Scholar defined self-efficacy as the measure of one's competiveness to complete tasks and reach goals which influences every aspect of human endeavours. Students obtain information to appraise their self-efficacy from their actual performance, their vicarious experiences. Persuasions they receive from others and their psychological reactions.

Self-efficacy describes a belief in one's capability to produce at their level of attainment to perform in certain manner to reach a certain goal. Self-efficacy differs from efficacy in that one has the power to produce an effect (efficacy) and the other is the belief in the power to produce that effect (Schunk and Perjares, 2002).

Self-efficacy beliefs are developed and reinforced by mastery, modeling and encouragement during socialization and reduction of stress reaction (Bundura, 1994). Students gain proficiency when they experience success through repetition activities. Self-efficacy could either be low or high. Kurbanoghu (2003) established a relationship between self-efficacy and Information Literacy Skills.

According to the National Board for Technical Education NBTC, there are one hundred and fifty-five (155) Technical Colleges in Nigeria. These colleges were established to offer technical and business courses ranging from mechanical craft, electrical installation, motor vehicle mechanic, fabrication and welding, computer craft, block laying and concreting furniture craft, painting and decoration, plumbing and pipe fitting, printing craft, graphic arts, catering craft, graphic arts and business studies. These courses lead to the award of National Technical Certificate and national Business Certificate by the National Business and Technical Board (NABTEB) after the successful completion of a three (3) years course. The reason for technical education according to (Ojimba, 2012) was too much emphasis on University education in

Nigeria which have reduced the economic opportunities of those who are more work oriented than academics.

Technical education is basically designed to offer students the opportunity to improving themselves in their chosen profession and contribute to the developmental needs of the society. Nuru (2007) as cited by Okoye R & Onyewe (2016) opined that any nation's economy is required to prepare young people for the jobs of the future of which technical education have crucial role to play. Technical education therefore was carefully united to train a needed man-power to fit in a gap university graduates may not fit-in. There is a general consensus that employer of labour demands more skills than they did in the past (Yang 2008). It is in the light of this that the national Board for Technical Education structured the programmes and curriculum in the technical colleges for produce the needed man-power at the completion of any programme in technical colleges. Self-efficacy could be a significant predictor of information literacy skills of students of Technical Colleges in South-south Nigeria.

According to Kofi Annan Secretary-General of the United nations 1997-2006 "information is liberating and knowledge is power. Certainly, students in Government Technical schools cannot learn without using information that requires the necessary skills (Bruce 2008 p111). Information literacy skills in its totality include the ability to find, evaluate. Store, manage and manipulate information to solve problems and to know what is on notice within social, ethical, cultural and legal context. Traditional literacy deals with the ability to read and write but there seems to be various types of literacy. Such as media literacy, computer literacy, library literacy, web literacy etcetera.

In this context, normal and active literacy focuses on making students in technical colleges to be aware of their environment, read and write in their day-to-day activities. Information literacy skills are quite different from that. They are rather a combination of all these and goes far beyond them. American Library Associate Presidential Committee and Information Literacy (ALAPCIL, 1989) explains "ultimately information literate students are those who have learned how to learn.

They know how to learn because they know how knowledge is organized, how to find information and how to use information in such a way that others can learn from them. These the students prepared for life-long learning because they can always find information needed for any task or decision at hand.

Bundy (2004) reported a relationship between information literacy and life-long learning. According to the Scholar, information literacy is the foundation for independent and life-long learning. This was amplified by ACRL (2000) which emphasized the need for information literacy skills for students in technical colleges so as to be able to process the large amount of information available in a contemporary society. Simply being exposed to a great deal of information will not make students information literate. Furthermore, Data smog refers to the idea that too much information can create information barrier in our lives. Especially students and the society require a special skill to handle this increasing information. Information literacy is therefore considered as the best solution to data smog (ACRL2006).

According to McTavish (2009) the information society is becoming more complex by the day and the need for students in Government Technical Colleges to increase and maximize their contributions to a healthy democratic and pluralistic society. In addition, students are to maintain a prosperous and sustainable economy. Besides, governments and the industries are challenged to create an educational system to focus on the students' attention on information literacy. Brink (2006) research was on government organisation, such as Human Resources and Skill Development in Canada, claims that almost half of the working-age of Canadian does not have the information literacy skills they need to meet the over-increasing demands of the information society.

In Africa, information literacy skills has not received the attention it deserves, for instance Baro (2011) conducted a survey of information literacy education in library schools in Africa. Findings showed that presently only a few library schools offer the course Information Literacy as a standalone course in their curricula. Rather, it

is briefly discussed as a topic in related courses. The reason for this, according to the Scholar is Library and Information science departments lack the technology, other facilities and qualified man-power to teach the course. Shithole et al (n.d.) conducted a survey on information literacy education. A case study of the African University, Mutare, Zimbabwe found that students do not understand that information literacy skills are transferable.

Kurbanoglu (2003) conducted a study on the link between self-efficacy, information literacy and life-long learning. According to this scholar, the characteristic of modern society is the constant changing process. When the volume of information release to the society increases the technology to cope with the processing of such information gains momentum and the use of technology becomes widespread.

Societies of the information age needs confident, independent, self-regulated learners equipped for life-long learning. Consequently, an information literate student knows how to learn and is capable to achieve life-long learning. Information literacy skills are therefore used to describe the skills of information problem solving (American Library Association 2000). The result of the study suggests that the level of students' perceived self-efficacy for information literacy increases slightly through the years and the highest level is acquired in the third year and decrease slightly at the final year.

Keshaverv et al (2016) study on student sense of self-efficacy in searching information from the web: A PLS approach. The results of the study reflected the importance of studying the students' searching behaviour as it now possible to help them improve their information searching and evaluating skills which are largely related to their self-efficacy. The more self-efficacy they have the more success in information searching could be expected. Other research findings have found significant relationship between self-efficacy and the behaviour of information searching in the sense that the more a student has self belief, the higher the level of their ability for information searching will be (Ata and Baran, 2011: Aalier and Serin, 2012; Cakmak, 2010). However, the concept of information searching self-efficacy as an integrated concept

is the students belief about accessing, using, sharing and evaluating of information (Kurbanoghu, Akkoyulu and Umay, 2006).

The role of information literacy self-efficacy in students learning and educational achievements has also been taken into consideration by De Meulemeester (2013). The results of the research showed that the test of improving students information literacy skills did not change after the second year while their information literacy self-efficacy increased by raising their educational level. The relationship between information literacy, self-efficacy, academic motivation and employment has also been explored. (Ross, Perkins & Bodey 2013) among students with and without paid employment. The findings indicate the importance of motivation in information self-efficacy.

A significant relationship was also found between the amount of time spent studying and information self-efficacy. The relationship between psychometric characteristics of student information literacy self-efficacy has also been explored (Brown, 2005). As seen in the literature reviewed, most of the researches in the field of self-efficacy and information literacy have been conducted by Turkish researchers in recent years in Turkish. However, this researcher was not able to lay hands of any empirical study on the topic self-efficacy as predictor of information literacy skills among students in Government technical Colleges in South/South, Nigeria. Therefore, this study is intended to bridge the gap.

The review of the literature revealed that there is a dearth of empirical research on self-efficacy as predictor of Information Literature Skills of students in Government Technical Colleges South/South, Nigeria. Most of the available research works are on information literacy skills of undergraduates, information literacy skills and life-long learning, information literacy education in library schools, the information society, and data smog. Most of these studies were carried out by Turkish researchers in recent years and in Turkish land. Therefore, this study investigated self-efficacy as predictor of information literacy skills of students in Government Technical Colleges South/South, Nigeria.

Research methodology

The study adopted description research design. Multi-stage sampling technique was adopted. At the first stage one Technical College was selected randomly from each of the 6 states that make up the South-south geo-political zone. These are Akwa Ibom, Bayelsa, Cross River, Delta, Edo and Rivers states. Each of these states has technical colleges as follows: Akwa Ibom – 6, Bayelsa 2, Cross River 4, Delta 6, Edo 7, and Rivers 4. At last 110 respondents were selected from six technical colleges, i.e. one (1) college from each state to form a sample population of 660. The research instrument used for data collection was a structure questionnaire on self-efficacy of students on information literacy skills (SESILS) designed by the researcher.

Results and discussion

The survey result showed that beginners in technical colleges in South/South, Nigeria score low in self-efficacy for information literacy skills and found it difficult to deploy necessary skills. Students level of perceived self-efficacy increases slowly as they pass through the school system in their first and second year. This is in agreement with (Kurbanogu, 2003).

The result also showed that students' self-efficacy belief for information literacy for problem solving becomes strong as he/she progress through the school system. This is not to suggest that time spent in the school is a factor that predict information literacy skills. Another factor that indicates students' acquisition of information literacy skills is their disposition to practice information seeking behavior. The students should be given practical training always on information seeking skills which is directed at building their self-efficacy.

In addition, it was also observed that quite a good number of students in technical colleges have not heard about information literacy skills even when they have been using such skills without knowing. The result showed that there was significant relationship between information literacy skills and self-efficacy ($r = ,358^{**}, N = 964, P<.05$). This suggests that self-efficacy had positively enhanced information

literacy skills in this study. This led to the rejection of the null hypothesis formulated for the study.

Conclusion and recommendations

Based on the findings of this study, it is recommended that students in technical colleges in South/South, Nigeria should be exposed to information literacy skills training early in life and there should be programme training as part of the school curriculum. In addition, since the psychology construct self-efficacy is found to be significantly related to information literacy skills of students, attention should be paid to develop students' self-efficacy for life-long learning. If Government Technical Colleges in South/South, Nigeria are to achieve their set objectives, the training should include information literacy skills so as to enhance their learning process and practice their acquired skills.

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