

INFORMATION LITERACY SKILLS PROFILE OF PRIVATE SECONDARY SCHOOL STUDENTS IN DELTA STATE, NIGERIA

AYINUOLA, Funmilayo Deborah¹ EKOKO, Onome Norah²

Senior Lecturer, Department of Library and Information Science, Delta State University.
onomealakpodia@gmail.com²

Abstract

The study investigated information literacy skills profile of private secondary school students in Delta State, Nigeria. The study was guided by seven research questions drawn from the steps of information literacy outlined in the Big6 Information Literacy model developed by Mike Eisenberg and Bob Berkowitz. The study employed the descriptive survey design. The study population is 895 Senior Secondary Students from 6 private secondary schools in the Warri for the 2020/2021 academic year in Delta State. The sample size is 264 using the random sampling technique. Simple percentage, frequency, Mean ($\bar{X}$) and Standard Deviation were used to answer the research questions setting the criterion mean point at 3.00. Among other findings, the study revealed that students in private secondary schools in Delta State can be said to possess a high information literacy profile.

Key Words: Information Literacy, Students, Private Secondary School. Profile, Delta State.

Introduction

The digitised environment we live in today is characterised with information overload which requires an almost overwhelming necessity for the knowledge on the need, location, retrieval, manipulation and use of information. The concept of information literacy was first used by Paul Zuroski in 1974, was used to describe an ability needed by individuals to survive and compete in the emerging information society. Information literacy, according to Zurkowski, is the capacity to employ strategies and skills for a variety of information resources. It also refers to the ability to use techniques and skills for the wide range of information tools as well as primary sources in molding information solution to a problem (Thomas, 2004). Presently, information literacy is regarded by governments, educators and information professionals globally as the main precursor for building lifelong learners, productive and functioning members of the community (Al-Issa, 2013).

Developing information literacy skills have become very essential because we live in an era of complex and constantly evolving information environment. These skills allow individuals to navigate through abundant information and decide what to use and how it is used (Foo et al., 2014). For students, the need for such skills cannot be over emphasised. Information literacy is important for school age children because of the need to train not only information literate individuals but also to promote lifelong learning, breed citizens that are prepared to deal with the exponential increase of information in variety of forms particularly digital information and succeed in the information environment of the future (Hanchinal & Hanchinal, 2018).

Some researchers have been interested in the information literacy profile of students for some years. There are reports of student's low information literacy profile, It is against this backdrop that the study seeks to investigate school libraries as correlate of information literacy competency among private secondary school students in Delta State, Nigeria.

Objectives of the Study

The objective of this study is to:

- i. Ascertain the extent of information literacy skills possessed by students in private secondary schools in Delta State,

Research Questions

The study found answers to the following research questions:

1. To what extent are students in private secondary schools in Delta State skilled in defining information tasks?
2. To what extent are students skilled in information seeking strategies?
3. To what extent are students skilled in locating needed information?
4. To what extent are students skilled in accessing needed information?
5. To what extent are students skilled in information use?
6. To what extent are students skilled in information synthesis?
7. To what extent are students skilled in information evaluation?

Conceptual Model

This study is anchored on the Big6 Information Literacy model. The model was developed by Mike Eisenberg and Bob Berkowitz in 1990. It provides a step-by-step illustration of how people can solve information problems in the information literacy era. The Big6 model is among the most popular approach used for instructing school age children information and technology skills.

According to Iriani and Wicaksono (2021) the model explains that successful information problem-solving encompasses six stages with two sub-stages under each stage (Eisenberg & Berkowitz, 1990). Eisenberg and Berkowitz explained that the Big6 Skills comprise a unified set of information and technology skills, which when taken together, form a process that can lead to the acquisition of information literacy skills. Through the Big6 process, students are able to know when there is a need for information and how to progress through a series of stages to solve information problems effectively and efficiently. The Big6 approach is systematic and allows a broad-based, deductive skill set that features as a structure for a distinct set of problem-solving skills (Eisenberg, 2003).

The Big6 model encompasses six components. Task definition, strategy information retrieval, determination of access location, information use, synthesis, and evaluation (Yudistira, 2017). According to Eisenberg and Berkowitz (2000), individuals who are information literate go through the stages intentionally or unintentionally when in need of information to solve a problem or decide. The Big6 Skills model offers a simple, flexible and broadly applicable approach of learning and teaching essential IL skills and competencies can to students (Eisenberg, 2008).

Literature Review

Information literacy is defined as abilities requiring individuals to appreciate the need for information, locate, appraise, and use the information. The Presidential Committee on Information Literacy stated that, “information literacy is a survival skill in the Information Age” (ALA, 1989, p.3). Information literacy according to Chartered Institute of Library and Information professionals (CILIP) (2004) can be defined as the recognition of one's information need, finding such information, and appraise, employ and share the information in an ethical manner. In the opinion of Johnston and Webber (2003), information literacy is the embrace of standard information characteristics to obtain, through appropriate channel, information that suits an information need, together with critical knowledge of the importance of ethical use of information in society. Webber (2006) expanded on the definition by highlighting some points:

1. Appropriate information behavior involves the fact that an information literate person is aware of what his/her information habits are and can adapt his/her information behavior depending on the type of information needed.
2. Whatever channels or medium refers to the notion that individuals may need different kinds of information.
3. Wise and ethical use of information society” insinuates that information literate people are aware of the way in which information may be culturally sensitive, or politically meaningful.

Information literacy skills is also referred to as possession of the necessary knowledge, skills and attitudes (the recognitions of the value, functions and roles of information) to recognize the need for information; recognize that accurate information is the foundation for reaching an intelligent decision; find sources of information; develop successful search strategies; access sources of information, including computer-based and other technologies; evaluate information; organize, integrate and use information in solving problem. It also encompasses understanding many of the economic, legal, and social issues surrounding information use ethically and legally. In other words, information literacy skills is the acquisition of skills that pertain to the knowledge on when and why information is needed, where to find and access it, how to evaluate, synthesize, use and communicate it ethically and legally; skills on how to determine the extent of information needed, how to access it, critically evaluate information and its sources, synthesize, use and communicate it ethically and legally (Anunobi&Udem, 2014).

Information literacy concept took hold in Nigeria in the 80s like many other African countries. The push for educational reform in the second half of the twentieth century. New ideas about how children learn raised questions about some common educational practices. The attainment of independence in 1960 also gave rise to pressure for educational change to meet national aspirations. It was acknowledged that modern day education has to be self-directed and lifelong, furnishing students with skills to meet new needs and adjust to fast changing circumstances. Nigeria's education policy statements reveal a close affinity with the ideas of information literacy (Dike &Amucheaz, 2021). Recognizing information literacy as an important skill of the 21st century, Adeyemi (2017), stated that it is necessary for every secondary school student to possess the traits of information literate person so as to be ahead in their study and general endeavor. Further explanation by Onyeneke and Obichere (2018) exposed the fact that information literacy skills has become necessary for students as that they are fully equipped with skills needed to navigate abundant information available for school activities.

Authors have looked at some of these skills for determining information literacy profile of students. For instance, a recent study by Gekara et al. (2021) studied the information literacy skills of secondary school students in Kenya. The findings of the study indicated that most secondary students in Nakuru County were not information literate. They relied on teachers to help them understand class assignments. The study concluded that teaching information literacy skills to secondary school students may lead to effective and efficient use of school libraries and flourish educational achievements hence turn around the dwindling standards of our educational sector. The study Boemo and Goitseman (2021) reported the results of an exploratory investigation into information literacy skills among high school students of six schools in the South East region of Botswana. Results indicated poor information skills among the students; the result also exposed the curriculum as a barrier towards the effective integration of information literacy skills into the educational system.

An investigation by Foo et al. (2014) on Singapore secondary school students' skills in searching, evaluating and using information. Findings revealed a generally unsatisfactory level of skills in some of the major aspects of information literacy. The scores were below 50 for the aspects skills related to information seeking strategies, location and access and information use. Only except task definition was above the benchmark.

In a study by Otoide (2015) on the ability of secondary school students from selected schools in Abraka to identify their information need revealed that although Abraka is a rural community, they displayed skills in being able to identify their information needs. While some other students in private secondary schools in Osogbo metropolis, Osun State, were also competent enough to make use of the Internet, television, facebook and textbooks as sources of information (Oyewo et al., 2019). Onyeneke and Obichere (2018) found that most secondary school students in Owerri use the library sometimes for their information needs. Similarly, majority of them consult fellow classmates and teachers for their information needs. Also, Amusan, and Lawal (2020) deduced that students had some level of recognition of information needs and information retrieval. They further concluded that the major information literacy skills possessed by the SSS students are ability to locate information in the library, confidence to learn from information solving experience and improve information literacy skills, competency to use different kinds of print information sources, usage of several information resources at the same time and confidence to evaluate information critically.

Benard and Dulle (2014) discovered that most students (77.1%) used textbooks compared to other sources to obtain information. In addition, students used dictionaries, novels, magazines among others. However, students tend to use Internet resources much more. Malliari et al. (2014) found that students in Greek high schools mostly used the Internet (73.6%) compared to other print resources due to the Internet's ability to facilitate communication. Yeboah et al (2017) observed that secondary school students in Ghana did not have skills to access information for their school work. The study also discovered that they lacked the basic skills to differentiate good information from bad ones.

Heidi and Barker (2009) also reported in their research into how high school students evaluate information sources found that most students viewed trustworthiness of information based on the website design rather than the content of the information. They cautioned that evaluating the website design alone is a risky practice and that students need to be better equipped to evaluate web content. The responses from the study by Yeboah, Dadzie, and Owusu- Ansah (2017) showed that the majority (62.4%) of the respondents from both schools check the sources of the information they used, while a minority (36.4%) of the students said they did not check the sources of the information they used.

An investigation Onyeneke and Obichere (2018) realized that the students possess minimal level of information seeking and ethics skills. Their results further showed the students only give credit and ask for permission to use others' intellectual works. Most students (2.78) use the ideas of others as their own confirming their low level of information ethics skills. Osunrinade (2018) investigated the extent to which demographic factors and information literacy skills of students in Ogun State, Nigeria determines their utilisation of media resources. The authors observed a moderate level of information literacy skills by the students.

Methodology

The study is a descriptive survey. This design was adopted to enable the researcher investigate the current status of information literacy profile of private secondary students in Delta State. The population is 895, consisting of Senior Secondary Students from 6 selected private secondary schools in the Warri, Delta State. The sample size is 264 students. According to Krejcie and Morgan (1970), when a population is between 850 and 900, 264 becomes the sample size. The study employed the random sampling technique to select forty-four (44) students from all SS 2 and 3 classes in each of the schools. The study employed a questionnaire as the instrument for collecting data. The questionnaire is titled "Information Literacy Skills and School Library Use Questionnaire" (ILSLUQ) is adapted from an instrument developed by Chang et al. (2016) which focused on the Big6 model of information literacy process, hence, its suitability for this study. The response will be based on a five-point likert scale of To a Very Great Extent (TVGE) (5), To a Great Extent (TGE) (4),

To a Medium Extent (TME) (3), To a Small Extent (TSE) (2) and To No Extent (TNE) (1). Data was collected by visiting the selected schools in Delta State. The data were analysed using measures such as frequency counts and percentages were used to analyse the questionnaire response rate and demographic data. The research questions were answered using statistical mean ($\bar{x}$) and Standard Deviation. 240 copies of the instrument were successfully retrieved indicating a response rate of 90%.

Results

Analysis of the Bio Data of the Respondents

Table 1: Age of the Respondents

AGE	FREQUENCY	PERCENTAGE (%)
13-14	15	6.3
15-16	135	56.3
17 and above	90	37.5

Table 1 showed the age distribution of the students. It shows that there are 135(56.3%) students between the ages of 15-16 years, 90(37.5%) of them are between the ages of 17 and above and 15(6.3%) are 13-14 years. This means that, most of the private secondary school students in Delta State are between the ages of 15-16 years implying that they are in senior classes.

Table 2: Sex of the Respondents

SEX	FREQUENCY	PERCENTAGE (%)
Males	128	53.3
Female	112	46.7
Total	240	100.0

Presented in Table 4.3 is the sex distribution of the respondents. The Table shows that 128(53.3%) of the students are males while 112(46.7%) are females. Implying that majority of the students in private secondary schools in Delta state are males.

Answering the Research Questions

Research Question 1: To what extent are students in private secondary schools in Delta State skilled in defining information tasks?

Table 3: Defining Information Tasks Skills

	TVGE	TGE	TME	TSE	TNE	MEAN	STD.
Define the information i need	44	122	47	20	7	3.73	0.95
Identify different source of information	29	123	60	20	8	3.60	0.92
Work with classmates outside class to prepare class assignment	38	67	116	8	11	3.47	0.96
						3.60	0.94

Table 3 shows the extent to which students can define their information need. It shows that with a mean of 3.60 (Std. = 0.94) which is greater than the criterion means of 3.00, students of private secondary schools in Delta State are able to define their information tasks to a great extent.

Research Question 2: To what extent are students skilled in information seeking strategies?

Table 4: Information Seeking Strategies Skills

	TVGE	TGE	TME	TSE	TNE	MEA N	STD.
Search information using boolean logic (and, or, and not)	34	85	104	10	7	3.54	0.89
Use truncations	28	84	108	12	8	3.47	0.89
Initiating search strategies	27	109	81	14	9	3.55	0.90
Limit search strategies by subject, language and date	26	98	91	15	10	3.48	0.92
Know how to find information	24	89	90	28	9	3.38	0.95
Search for information by subject, author, title, language, and date	31	96	67	28	18	3.39	1.09
						3.47	0.93

Table 4 shows that the mean of 3.47 (Std. = 0.93) is above the criterion benchmark. Meaning that the students have information seeking skills. They can initiate search strategies, make use of Boolean operators and limit their search by employing different measures of language, subject and date.

Research Question 3: To what extent are students skilled in locating needed information?

Table 5: Locating Needed Information Skills

	TVGE	TGE	TME	TSE	TNE	MEAN	STD.
Locate resource in the library using library catalogue	23	111	81	17	8	3.52	0.89
Locate information sources in the library	27	97	96	11	9	3.51	0.89
Locate information sources in the library	28	104	83	14	11	3.52	0.94
Select the most appropriate information needed	30	87	100	16	17	3.49	0.90
						3.51	0.90

Presented in Table 5 is the extent to which students can locate needed information. The Table shows that the mean of 3.51 (Std. = 0.90) is above the criterion mean. Revealing that the students can locate the information they need to a great extent.

Research Question 4: To what extent are students skilled in information use?

Table 6: Information Use Skills

	TVGE	TGE	TME	TSE	TNE	MEAN	STD.
Use different kind of print sources (such as books, periodicals)	25	97	97	13	8	3.49	0.88
Use electronic information sources	23	91	88	30	8	3.38	0.94
Use search indexes and electronic databases	17	93	82	29	19	3.25	1.03
Use many resources at the same time	16	89	89	26	20	3.23	1.02
Apply information for any assignment is	17	90	88	27	18	3.25	1.01
Use information to make specific personal decisions	25	80	96	30	9	3.34	0.96
						3.32	0.97

Presented in Table 6 is the extent to which students can make use of retrieved information. The mean of 3.32 (Std. = 0.97) is above the criterion mean, indicating that students in private secondary schools can use information to a great extent.

Research Question 5: To what extent are students skilled in information synthesis?

Table 7: Information Synthesis Skills

	TVGE	TGE	TME	TSE	TNE	MEAN	STD.
Learn from my information solving experience and improve information literacy	15	81	117	18	9	3.31	0.85
Identify potential sources of information	16	94	105	14	11	3.37	0.87
						3.34	0.86

The mean of 3.34 (Std. = 0.86) is an indication of student's information synthesis skills. They are able to learn from information solving experiences to improve their information literacy and identify potential sources of information.

Research Question 6: To what extent are students skilled in information evaluation?

Table 8: Information Evaluation Skills

	TVGE	TGE	TME	TSE	TNE	MEAN	STD.
Critically assess information gotten from internet	11	99	101	21	8	3.35	0.84
Ability to interpret the visual information (i.e. Graph, tables, diagram)	9	101	101	17	12	3.32	0.86
Assess information obtained from textbooks	10	81	117	23	9	3.25	0.83
Identify authenticity of print and e-sources	4	86	117	24	9	3.22	0.79
						3.29	0.83

Presented in Table 8 is the extent of information evaluation skills possessed by students in Delta State. It shows that with a score of 3.4129(Std. = 0.83) which is greater than the criterion means of 3.00, students of private secondary schools in Delta State possess information evaluation skills to a great extent.

Table 9: Information Literacy Skills Possessed by Students

	MEAN	STD.
Task definition	3.60	0.94
Information seeking strategies	3.47	0.93
Locating and accessing information	3.51	0.90
Information use	3.32	0.97
Information synthesis	3.34	0.86
Information evaluation	3.29	0.83
Aggregate-Mean	3.41	0.92

Presented in Table 9 is the extent of information literacy skills possessed by students of private secondary schools in Delta State. Which is seen in the aggregate mean of 3.41(Std. = 0.92) which is greater than the criterion means of 3.00, students of private secondary schools in Delta State possess information literacy skills to a great extent.

Discussion of the Findings

The majority of the students are between the ages of 15-16, and the male students are more in number in private secondary schools in Delta State. The students are to a great extent skilled in defining information tasks. According to Alakpodia (2019), ability to define information task relates to identifying an information need which involves gauging the nature and extent of information needed, that is, the student could define the need for information by developing a statement and formulating questions based on the need, exploring information sources to increase familiarity with the topic. The result of this finding agrees with those of Otoide (2015) who investigated students in Abraka in Delta State Nigeria and (OyewoAbatan and Salau (2019) who studied students in Lagos State. These authors reported from their separate studies that the students were skilled in defining their information tasks and needs.

The study sought to find the extent to which students in private secondary schools are skilled in information seeking strategies. The result indicated that the students have high information seeking skills. This is evident in their ability to initiate search strategies, make use of Boolean operators and limit their search by employing different measures of language, subject and date. This result is contradictory to an earlier finding presented by Foo, Majid, Mokhtar, Zhang, Chang, Luyt and Theng (2014) that students information seeking strategy skills were unsatisfactory and below the acceptable standard. The result also showed that students were skilled in locating needed information. This finding agrees with that of Onyeneke and Obichere (2018) that secondary school students in Owerri were able to locate information for their needs by visiting the library, consulting their classmates and teachers for their information needs. Also, Amusan, and Lawal (2020) concluded that most SSS students had skills to locate information they need from the library, confidence to learn from information solving experience and improve information literacy skills, competency to use different kinds of print sources, and to evaluate information critically. On the contrary, this result is not in agreement with that of Yeboah, Dadzie and Owusu-Ansah (2017), as these researchers observed that students in Ghana lacked the skills to effectively access information for their academic work.

Research question four sought to answer the extent to which students in private secondary schools skilled in information use. The result shows that students can use information to a great extent. This result tallies with that of Oyewo et al. (2019) in Osogbo metropolis, Osun State, that the students were competent enough to make use of the information from different sources. This result is at variance with that presented by Foo et al. (2014) in Singapore about their skills in searching, evaluating and using information. Findings revealed information use skills were below the accepted benchmark. Information synthesis and evaluation are also vital aspects of information literacy for students. This study also revealed an adequate level of information synthesis skills.

Lastly the study determined the overall information literacy profile of the students. This was done by calculating an overall mean and SD for all the aspects of information literacy. **The results showed that** students of private secondary schools in Delta State possess information literacy skills to a great extent. A close look also shows that in all the aspects of information literacy skills, task definition has the highest score. This is followed by locate and access of information, information-seeking strategies, synthesis, information use, and information evaluation come last on the list. This is an indication that even though the students possess these skills at different levels, they are efficiently skilled in the information literacy steps. The result from this study agrees with the findings of Amusan, and Lawal (2020) that SSS students possessed some level of information literacy skills. Similarly, the finding agrees with the result by Osunrinade (2018) that students in Ogun State, Nigeria possessed a moderate level of information literacy skills. The result also concurs with a similar finding by Otoide (2015) that students in Abraka displayed some moderate skills of being able to identify their information needs. Oyewo et al. (2019), also reported that students in Ikeja, Lagos State were able to identify their information needs, exhibiting some level of information literacy skills. On the contrary, this result is not in agreement with some very recent results. For instance, it did not agree with the finding of Gekara et al. (2021) that students in Kenya are not information literate. Also, the study Boemo and Goitseman (2021) reported poor information skills among the students in high school in the Southeast region of Botswana. Also, not in agreement with the current finding is an investigation result by Onyeneke and Obichere (2018) that the students possess minimal level of information ethics and seeking skills.

Conclusion

Students in private secondary schools in Delta State can be said to possess a high information literacy profile. Applying the steps of the Big6 model developed by Eisenberg and Berkowitz, the study concludes that the students can define information task, develop information seeking strategies, use, synthesis and evaluate information to a great extent. Since the students in private secondary schools in Delta State possess high information literacy skills, school management should endeavour to continue to furnish and equip the school libraries, so that when the students visit the school libraries there will be adequate information resources for them to make use of.

RECOMMENDATIONS

The study recommends that:

1. Since the students in private secondary schools have IL skills, school management should endeavour to continue to furnish and equip the school libraries, so that when the students visit the school libraries there will be adequate information resources for them to make use of.
2. School librarians should engage in activities that will create awareness for some of the more common types of information resources like textbooks and reference books, this will help to improve their usage among students.
3. In addition, since there is a relationship between information literacy skills and the library use, it is important to encourage students to use the library for more studies and research, instead of them coming to the library to meet with friends and while away time, they should be engaged with more productive activities while they are in the library.

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