

## **Media Literacy Skills and Use of Electronic Resources by Library and Information Science Students' in Digital Environment, University of Uyo, Nigeria**

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**ABSTRACT:** *This study investigated the influence of media literacy skills and use of electronic resources by Library and Information Students in digital environment, University of Uyo. Three research questions and three research hypotheses were formulated to guide the study. The study involved 213 LIS undergraduates who were registered library users in 2021/2022 academic session. Census sampling technique were used for the study; the total population was used as sample size. A structured questionnaire tagged: media literacy skills and use of electronic resources by LIS in digital environment was used for data collection. The instrument was vetted by two experts in department of educational foundation, University of Uyo. The instrument was administered on the respondents by the researchers with help of research assistants in the three campus libraries in the University of Uyo. The data collected were analyzed using mean statistics and t-test to test the hypotheses. The result of the data analyzed revealed that a significant influence exists between each of the media literacy skills and use of electronic resources by LIS students in the University of Uyo. The study recommends among others that the University Library and Department of library and Information Science should collaborate in designing programme for teaching of media literacy skills in the University to equipped students with adequate basic media literacy skills.*

**Keywords:** media literacy, use, electronic resources, students, digital environment

### **INTRODUCTION**

The role of libraries and information resources in academic pursuits has evolved significantly. Technology has rapidly transformed the landscape of library and information dissemination. Thus, it is crucial for Library and Information Science (LIS) students to possess media literacy skills to navigate the vast array of electronic resources in the library effectively.

The University of Uyo library, like many other university libraries, has become hubs for digital information, offering a wide range of electronic resources that support research, learning, and teaching. The integration of media literacy into the educational process is essential to equip LIS students with the necessary skills for ethical and efficient use of these resources. Media literacy is the ability to analyze and evaluate different types of media and the messages sent. In today's world, media is a part of our everyday lives. Nonetheless, many people lack the knowledge and critical thinking skills needed to understand and interpret the information they received and some users are unaware of how media sources affect their opinions and decisions. Anderson and Hobbs (2019) stated that media literacy is a fundamental skill for the 21st century, involving the ability to critically analyze, interpret, and create media content across various platforms. It encompasses understanding the role and impact of media in society, discerning bias and credibility, and utilizing media for effective communication and learning. Media literacy encompasses not only the ability to access and understand media but also the responsible and ethical use of information (Williams, 2019). Literacy concepts within the university of Uyo libraries is crucial for determining the effectiveness of use of electronic resources.

Electronic resources have become the order of today learning and it plays a vital role in academic research and learning (Jones, 2018). For effective utilization of these resources LIS student must pose media literacy skills for ease of access and use. Electronic resources are materials in digital format accessible electronically. Therefore, use of electronic resources in the context of this study refers to the extent to which students make use of digital information sources, databases, and online materials available in the University of Uyo library.

Accessibility skills refer to a student's ability to access and retrieve electronic resources from the library's digital collection. This includes knowledge of library databases, search techniques, and familiarity with digital platforms and tools. Effective utilization of electronic resources involves more than just access; it requires the analytical skills to evaluate the quality and relevance of the digital content. As the volume of digital content increases, LIS students must possess analytical skills to critically assess the relevance, credibility, and accuracy of the information they retrieve from electronic resources. Media literacy involves

the ability to critically analyze and evaluate different types of media, including digital content.

Analytical skills empower the students to critically assess the credibility of online sources, checking for factor like authorship, publication date and peer-review status. This is crucial in academic research to ensure reliable references (Egghe, 2016). Student must determine the relevance of electronic to their research topics. Analytical skill helps them quickly assess whether a resource align with their research objective and discard irrelevant information (Grant, 2014). Analytical skill allows students to compare and contrast information from different electronic resources.

Evaluation skills are essential, particularly in the digital age, in a digital environment filled with information of varying quality, evaluation skills help students distinguish between credible and unreliable sources. This is fundamental to ensuring the integrity of research and decision-making (Egghe, 2016). Students must determine the relevance of electronic resources to their specific research topics. Evaluation skills empower them to quickly gauge whether a resource aligns with their research objectives and to sift out irrelevant information. Digital resources can often be influenced by bias or lack transparency. Evaluation skills allow students to critically assess the potential bias and trustworthiness of sources, which is critical for objective research and information consumption (Koltay, 2011). Based on the above background, the study was carried out to investigate media literacy skills and use of electronic resources by LIS students in the University of Uyo, Uyo.

### **Statement of the Problem**

In today's rapidly evolving digital landscape, academic libraries, including the University of Uyo serve as crucial hubs for providing students with access to a vast array of electronic resources. Within the realm of Library and Information Science (LIS) education, media literacy skills are recognized as fundamental for effectively navigating and utilizing these electronic resources.

Despite the acknowledged importance of media literacy skills and the availability of electronic resources, a notable gap seems to exist in the level of utilization of these resources by LIS students within the University of Uyo libraries. Therefore, the core problem under

investigation is: whether media literacy skills can enhance students in the department of library and information science to utilize e-resources in University of Uyo.

### **Purpose of the Study**

1. To examine the influence of accessibility skills on LIS students' use of electronic resources in the University of Uyo.
2. To examine the influence of analytical skills on LIS students' use of electronic resources in the University of Uyo.
3. To determine the influence of evaluation skills on LIS students' use of electronic resources in the University of Uyo.
- 4.

### **Research Question**

1. What is the influence of accessibility skills on LIS students' use of electronic resources in the University of Uyo?
2. What is the influence of analytical skills on LIS students use of electronic resources in the University of Uyo?
3. What is the influence of evaluation skills on LIS students use of electronic resources in the University of Uyo?
- 4.

### **Hypotheses**

1. There is no significant influence of accessibility skills on LIS students' use of electronic resources in the University of Uyo.
2. There is no significant influence of analytical skills on LIS students' and use of electronic resources in the University of Uyo.
3. There is no significant influence of evaluative skills on LIS students' and use of electronic resources in the University of Uyo.

## **LITERATURE REVIEW**

Media literacy is a comprehensive skill set that empowers individuals to access, analyze, evaluate, and create various forms of media, including digital, print, and audiovisual content. In a digital age, where information is abundant and often rapidly disseminated, media literacy becomes a pivotal skill in navigating and understanding the media landscape. Media

literacy skills are essential in the modern age for several reasons. First, it empowers individuals to navigate the vast and complex media landscape. As noted by Hobbs, it helps people make sense of the messages conveyed by different types of media and understand the role media plays in shaping our culture and society. (Hobbs, 2010). Livingstone and Third (2017) stress that media literacy skills promotes critical thinking and the ability to discern credible information from misinformation, which is particularly important in an era of fake news and digital disinformation.

Media literacy is an indispensable skill for library and information science students as they utilize electronic resources. It equips them to critically analyze digital content, distinguish between reliable and misleading information, and understand the power of media in shaping perspectives. By promoting media literacy within the curriculum, educational institutions can prepare students to be responsible consumers and producers of electronic resources, thereby enhancing their effectiveness in the field of library and information science.

The advent of electronic resources has significantly transformed the field of Library and Information Science, reshaping how students engage with information, conducts research, and prepare for professional roles. This literature review explores the multifaceted use of electronic resources by LIS students, highlighting the impact on education, research, and the development of essential skills. Access to Information and Research: The shift from traditional to electronic resources has revolutionized how LIS students access information. Electronic databases, academic journals, and digital libraries provide a vast repository of scholarly content, enhancing the depth and breadth of research capabilities (Borgman, 2000). Studies indicate that the ease of access to electronic resources contributes to increased research productivity among LIS students, enabling them to explore diverse perspectives and stay current with evolving topics (Tenopir, *et al.*, 2017).

Technology Integration in Library Management: The integration of electronic resources into library management systems has become paramount in LIS education. Learning Management Systems (LMS) and Integrated Library Systems (ILS) equip students with practical skills in cataloging, circulation, and resource management (Holley, 2009). Electronic tools play a pivotal role in preparing students for the digital future of libraries, where automated systems and online catalogs are integral components (Lynch, 2016). The

digital landscape offers LIS students opportunities for continuous professional development. Virtual conferences, webinars, and online forums enable students to connect with experts, share insights, and expand their professional networks (Donelan, 2015). Active participation in online communities and social media platforms fosters collaboration, knowledge exchange, and awareness of emerging trends within the Library and Information Science field (Abram, 2015).

**Digital Archives and Preservation:** Electronic resources contribute significantly to the preservation and management of digital archives. Students engage in learning how to utilize electronic tools for digital curation, metadata creation, and ensuring the longevity of digital assets (Dappert, Sebastin and Carol, 2013). **Information Retrieval Skills:** Electronic databases and search engines necessitate the development of advanced information retrieval skills among LIS students. Studies highlight the importance of incorporating training programs that enhance students' ability to navigate and utilize electronic information resources effectively (Choi and Rasmussen, 2018). The evolving nature of information retrieval underscores the need for LIS students to stay adaptable and continuously update their search techniques in response to technological advancements (Marchionini, 2006).

**Open Access and Digital Literacy:** The rise of open access resources has influenced LIS education by promoting the principles of openness, inclusivity, and the free exchange of information. LIS students are increasingly exposed to open access journals, repositories, and educational resources, contributing to the development of a more democratized information landscape (Willinsky, 2006). Bruce and Chambers (2002) stressed that digital literacy is identified as a crucial component, with LIS programs incorporating courses that focus on evaluating, creating, and disseminating digital content ethically and responsibly. He also noted that access to electronic resources is a critical aspect of media literacy and is particularly relevant to library and information science students who rely on these resources for academic and professional purposes. Accessibility skills, in this context, refer to the ability of students to effectively access and utilize electronic resources while ensuring that these resources are available and usable for all individuals, including those with disabilities. Accessibility is not limited to compliance but also enhances the user experience. When electronic resources are designed with accessibility in mind, they are generally more user-friendly for all students, leading to improved learning outcomes (Ternenge and Kashimana,

2019). According to Gibbons (2016) Library and information science students, in particular, need to be proficient in accessing and utilizing electronic resources. Egghe (2016) noted that another important skill is analytical skills which plays a pivotal role for effective utilization of electronic resources by library and information science students. These skills are crucial for critically assessing the quality, relevance, and credibility of digital information sources. Analytical skills involve the ability to dissect and evaluate information, and they are integral to media literacy. In the context of electronic resources, these skills are paramount for several reasons. Analytical skills enable students to discern between high-quality and low-quality digital resources. This is essential for maintaining the academic rigor of their research and avoiding the use of unreliable information.

Egghe (2016) also noted that evaluation skills are essential, particularly in the digital age, In a digital environment filled with information of varying quality, evaluation skills help students distinguish between credible and unreliable sources. This is fundamental to ensuring the integrity of research and decision-making. Students must determine the relevance of electronic resources to their specific research topics. Evaluation skills empower them to quickly gauge whether a resource aligns with their research objectives and to sift out irrelevant information. Digital resources can often be influenced by bias or lack transparency. Evaluation skills allow students to critically assess the potential bias and trustworthiness of sources, which is critical for objective research and information consumption (Koltay, 2011). According to Wainer (2011) Digital information evolves rapidly, and students need to evaluate the currency and reliability of electronic resources. This involves checking for publication dates and considering whether the information is up-to-date). Students should be able to compare multiple electronic resources, analyzing differences in information, perspectives, and depth of coverage. Evaluation skills are crucial for synthesizing diverse viewpoints and understanding a topic comprehensively.

## **METHODOLOGY**

The study adopted a descriptive research design to investigate media literacy skills and the utilization of electronic resources among Library and Information Science (LIS) students in the University of Uyo library. The area of the study was University of Uyo Main Library that is situated inside the University Main Campus, Use Offot. The population comprised of

213 undergraduate students in the Department of Library and Information Science who were registered in 2021/2022 academic session. Census sample techniques was used to sample the entire population for the study. Questionnaire titled “media library skills and use of electronic resources by LIS student questionnaire (MLSSERQ) was used for data collection. The validity of the instrument was obtained through vetting by two experts in the department of educational foundation and noted that the instrument was reliable to measure what intends to measure. The instrument was administered to respondents with the help of two research assistant. Each respondent was guided to fill and return the questionnaire on the spot. Out of the 213 copies that were administered, 203 copies representing (95.3%) were correctly filled and retrieved for data analysis. Data collected were analyzed using mean statistics to answer the research questions and t-test to test the hypotheses at .05 level of significant.

## RESULTS AND DISCUSSIONS

### Research Question 1

What is the influence of accessibility skills on LIS students’ use of electronic resources in the University of Uyo library?

Mean statistics were used to answer this question, the result of the analysis is as presented in Tables 4.1

**Table 4.1: Mean statistics of the influence of accessibility skills on LIS Students’ use of electronic resources in the University of Uyo library (N=203)**

S/N	Accessibility Skills	SA	A	D	SD	$\bar{x}$	SD	Decision
1	I can access any information from the electronic source	46	93	58	6	2.88	0.79	Agreed
2	I can actively access information from diverse electronic source	136	35	32	0	3.51	0.75	Agreed
3	I can access information from electronic source	84	111	8	0	3.37	0.56	Agreed
4	Access to electronic source depends on digital skills	100	76	27	0	3.36	0.71	Agreed
5.	I can confidently interpret data obtained from electronic sources	56	97	35	15	2.96	0.86	Agreed
<b>Cluster Mean</b>						<b>3.22</b>	<b>0.73</b>	<b>Agreed</b>



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The result in Table 4.1 shows the mean range for the response of the respondents on influence of accessibility skills on LIS students' use of electronic resources in the University of Uyo library for all the items are above the cutoff point of 2.50. This means that the respondents agreed that: they can access any information from the electronic source, they can actively access information from diverse electronic source, they can access information from electronic source, access to electronic source depends on digital skills and they can confidently interpret data obtained from electronic sources. The standard deviation scores of the respondents which ranged from 0.56 to 0.86 and since the spread of the scores are not far apart, it means that the respondents share similar views on the items. Also, the cluster mean of 3.22 for all the items indicates that there is influence of accessibility skills on LIS students' use of electronic resources in the University of Uyo library.

**Research Question 2**

What is the influence of analytical skills on LIS students use of electronic resources in the University of Uyo library?

Mean statistics were used to answer this question; the result of the analysis is as presented in Tables 4.2:

**Table 4.2: Mean statistics of the influence of analytical skills on LIS students use of electronic resources in the University of Uyo library (N=203)**

S/N	Analytical skills	SA	A	D	SD	$\bar{x}$	SD	Decision
6	I can confidently interpret data obtained from electronic source	147	24	32	0	3.57	0.75	Agreed
7	I can interpret any data from electronic sources	101	52	39	11	3.20	0.93	Agreed
8	With my knowledge of statistical interpretation, I can use electronic resources.	162	30	11	0	3.74	0.55	Agreed
9	Analytical skill requires the individual to understand information at a glance.	159	38	6	0	3.75	0.50	Agreed
10	It is necessary to possess analytical skill in the digital age so as to use electronic resources.	114	63	26	0	3.43	0.71	Agreed
<b>Cluster Mean</b>						<b>3.54</b>	<b>0.69</b>	<b>Agreed</b>

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The result in Table 4.2 shows the mean range for the response of the respondents on influence of analytical skills on LIS students' use of electronic resources in the University of Uyo library for all the items are above the cutoff point of 2.50. This means that the respondents agreed that: they can confidently interpret data obtained from electronic source, they can interpret any data from electronic sources, with their knowledge of statistical interpretation, they can use electronic resources, analytical skill requires the individual to understand information at a glance and it is necessary to possess analytical skill in the digital age so as to use electronic resources. The result in Table 4.2 also showed standard deviation scores of the respondents which ranged from 0.50 to 0.93 and since the spread of the scores are not far apart, it means that the respondents shared similar views on the items. Also, the cluster mean of 3.54 for all the items indicates that there is influence of analytical skills on LIS students' use of electronic resources in the University of Uyo library.

**Research Question 3**

What is the influence of evaluation skills on LIS students use of electronic resources in the University of Uyo library?

Mean statistics were used to this question, the result of the analysis is as presented in Tables 4.3:

**Table 4.3: Mean statistics of the influence of evaluation skills on LIS students use of electronic resources in the University of Uyo library (N=203)**

S/N	Evaluative skills	SA	A	D	SD	$\bar{x}$	SD	Decision
11	I can distinguish between reliable and unreliable information from electronic source	148	27	28	0	3.59	0.72	Agreed
12	I can critically evaluate information from various media services	75	63	41	24	2.93	1.02	Agreed
13	Evaluative skills involve understanding the principles underlying the originality of information.	60	54	52	37	2.68	1.09	Agreed
14	I possess the re-quits knowledge of reliable source of information from media	107	68	28	0	3.39	0.72	Agreed
15	I can evaluate any information from electronic sources	147	6	50	0	3.48	0.86	Agreed
<b>Cluster Mean</b>						<b>3.21</b>	<b>0.88</b>	<b>Agreed</b>

The result in Table 4.3 shows the mean range for the response of the respondents on influence of evaluation skills on LIS students' use of electronic resources in the University

of Uyo library for all the items are above the cutoff point of 2.50. This means that the respondents agreed that: they can distinguish between reliable and unreliable information from electronic source, they can critically evaluate information from various media services, evaluative skills involve understanding the principles underlying the originality of information, they possess the re-quits knowledge of reliable source of information from media and they can evaluate any information from electronic sources. The result in Table 4.3 also showed standard deviation scores of the respondents which ranged from 0.72 to 1.09 and since the spread of the scores are not far apart, it means that the respondents shared similar views on the items. Also, the cluster means of 3.21 for all the items indicates that there is influence of evaluation skills on LIS students' use of electronic resources in the University of Uyo library.

**Hypothesis 1:** There is no significant influence of accessibility skills on LIS students' use of electronic resources in the University of Uyo library.

Dependent t-test was used to test this hypothesis, the result of the analysis is as presented in Tables 4.4:

**Table 4.4 :** Dependent t-test of the influence of accessibility skills on LIS students' use of electronic resources in the University of Uyo library (N=203)

	Variables	Mean	N	SD	t-cal	t-crit	Decision
Pair 1	Accessibility skills	3.22	203	0.40	7.56	1.97	Significant
	Use of electronic resources	2.97	203	0.32			

The result in Table 4.4 shows that the calculated t-value of 7.56 was greater than the critical t-value of 1.97 at 202 degrees of freedom and at .05 level of significance. With this result, the null hypothesis was retained. This implies that there is no significant influence of accessibility skills on LIS students' use of electronic resources in the University of Uyo library.

**Hypothesis 2:** There is no significant influence of analytical skills on LIS students' use of electronic resources in the University of Uyo library.

Dependent t-test was used to test this hypothesis, the result of the analysis is as presented in Tables 4.5:

**Table 4.5 : Dependent t-test of the influence of analytical skills on LIS students use of electronic resources in the University of Uyo library (N=203)**

	Variables	Mean	N	SD	t-cal	t-crit	Decision
Pair 1	Analytical skills	3.54	203	0.33	18.84	1.97	Significant
	Use of electronic resources_	2.97	203	0.32			

The result in Table 4.5 shows that the calculated t-value of 18.84 was greater than the critical t-value of 1.97 at 202 degrees of freedom. With this result, the null hypothesis was retained. This implies that there is no significant influence of analytical skills on LIS students use of electronic resources in the University of Uyo library.

**Hypothesis 3:** There is no significant influence of evaluation skills on LIS students use of electronic resources in the University of Uyo library. Dependent t-test was used to test this hypothesis, the result of the analysis is as presented in Tables 4.6:

**Table 4.6: Dependent t-test of the influence of evaluation skills on LIS students use of electronic resources in the University of Uyo library (N=203)**

	Variables	Mean	N	SD	t-cal	t-cal	Decision
Pair 1	Evaluative skills	3.21	203	0.42	6.37	1.97	Significant
	Use of electronic resources	2.97	203	0.32			

The result in Table 4.6 shows that the calculated t-value of 6.37 was greater than the critical t-value of 1.97 at 202 degrees of freedom and at .05 level of significance. With this result, the null hypothesis was retained. This implies that there is significant influence of evaluation skills on LIS students use of electronic resources in the University of Uyo library.

## DISCUSSION OF FINDINGS

### Accessibility Skills and Use of Electronic Resources

The result of data analysis on hypothesis one reveals that is a significant influence between Accessibility skills among the list students and use of the electronic resources in University

of Uyo libraries. This means that the more the LIS students possess the accessibility skills, the more the likely to use the electronic resources in the university libraries. In support of this, Smith (2018) emphasizes the crucial role of accessibility skills in enhancing students' utilization of electronic resources in academic libraries. Furthermore, Johnson (2019) underscores the importance of training students in information accessibility, suggesting that it positively impacts their engagement with electronic resources.

### **Analytical Skills and Use of Electronic Resources**

Analytical skills and use of the result of data analyzed on hypothesis two shows that the exist a strong positive influence between analytical skills use of electronic resources by the LIS students in university of Uyo. This implies that more knowledge of Analytical skill such as ability to interpretation and analyzed data, the more they can access electronic resources in the university libraries. This finding is supported by Gibbons (2016). Who pinpoints some key electronic uses such as information retrieval skills, digital skills, evaluative skills and data management skills. Supporting this, Turner (2020) also advocates for the integration of analytical skills in library education to enhance students' capacity to extract valuable information from electronic resources.

### **Evaluation Skills and Use of Electronic Resources**

The result data analyzed on hypothesis three reveals that there exists a significant influence between evaluation skills and use of electronic resources by the LIS students in university of Uyo. This means that the more the LIS students possess the evaluative skills the more they can confidently use the electronic resources in the university libraries. This result is supported by Egghe (2016) who stated that it is critically necessary to assess the credibility of online sources, checking for factors like review startups among others and lordship, publication details and peer. In addition, Taylor (2017) supports the notion that honing evaluation skills is paramount for students to effectively navigate and use electronic resources in libraries.

## **CONCLUSION**

From the findings of this study, it can be concluded that the under-utilization of electronic resources in the University of Uyo libraries by the LIS students can be traced to the level of

their media literacy competencies in the use of the libraries. It could also be concluded that accessibility skill significantly predicted LIS students use of electronic resources in the University of Uyo libraries. Furthermore, both analytical skills and evaluative skills have significant influence on students use of electronic resources in University of Uyo Libraries. These factors revolve around the knowledge and skills of information competency tools as well as knowledge of online public access catalogue (OPAC). In addition, it is clear from the findings that poor media literacy skills such as analytical skills as well as evaluative skills by most LIS students in University of Uyo are the root causes of the underutilization of electronic resources in the University libraries.

Finally, media literacy skills are important component for effective usage of electronic resources in the University system including University of Uyo because of its roles in academic achievement and lifelong learning. It is obvious that lack of media skills or competence would have negative effect on the LIS students use of electronic resources in the University libraries.

### **Recommendations**

1. On the knowledge of accessibility skills. The university library should tailor the use of Library education on basic computer skills to help students to understand basic access tools and use of e-resources as well as application of information and communication technologies (ICTs).
2. On the analytical skills. The University library and department of Library and Information science should be collaborated to design course content on analytical skills in order to help students acquire analytical skills in accessing information as well as data interpretation.
3. On the knowledge of evaluative skills. Students at all levels should be taught the basic criteria for information evaluation.
4. The use of Library skills programme currently being taught in the University of Uyo should be reviewed taking into cognizance the new information literacy skills such as media literacy skills, analytical skills, accessibility skills as well as evaluative skills in accessing e-resources in the University libraries.

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