Examining the Level of Information Literacy among First-Year English students at the University of Sargodha

Sohail Mehmood, Shahid Mehmood, Shaista Shahid University of Sargodha Pakistan



ABSTRACT: We have studied the information literacy skills of the users who use English as the primary communication at Sargodha University. In our study, a total of 160 undergraduates, both men and women. To reach their end goal, users had to fill out a questionnaire created by Mittermeyer and Quirion (2003). This study showed that undergraduates at the studied institution need to learn more about using information. Because of this outcome, it was suggested that students from UOS need to participate in the research activities.

Keywords: "Information Literacy," "Undergraduates," and "English Language" (Information Literacy, Undergraduates, English Language

Received: 18 October 2022, Revised 19 December 2022, Accepted 29 December 2022

DOI: 10.6025/jio/2023/13/1/1-14

Copyright: with Authors

1. Introduction

As described by Marais (1992) and quoted by Hepworth, "information literacy" is "the process of learning knowledge about attitudes towards and information abilities, as a significant determinant of how individuals utilise reality, develop, live, work, and communicate in an information society,". Similar to informational competence is the concept of "information literacy." The phrase "information skills" refers to "the process of developing knowledge about attitudes towards and skills in information," since both students and educators may benefit from knowing how to use online resources like databases and search engines efficiently. When seen in this light, information literacy becomes an issue that affects more than just individuals and schools.

An examination of Shapiro and Hughes's 1992 article explored information literacy as a liberal art form. The ability to use computers and discover information is only part of what's meant by "information literacy;" a more complete definition would also involve critical thinking about information's nature, technological infrastructure, and social, cultural, and even philosophical implications. Although knowing how to use computers and find information online are technically valuable skills, they scratch the surface of what information literacy requires. Literacy in information and computer technology is as essential to the mental framework of an educated citizen as was mastery of the liberal arts (grammar, logic, and rhetoric) in the Middle Ages.

Information literacy in Pakistan needs to be addressed and studied as these kinds of studies are less. We in this paper have studied the concept with the specific application at the University of Sargodha. This work starts with a conceptual discussion on information literacy, followed by early research. We have outlined the methodology and the data analysis. We provide a summary of the discussions and contributions.

Students in their first year of college in Pakistan sometimes have to leave their schools without access to sufficient library resources. This is because these students place a high value on textbooks and need more flexibility to embrace a new pedagogy that emphasises critical thinking and individual initiative. They could have struggled if they ever had to write a report in high school. The examples include possible writing about a troublesome event that happened. In that case, it may take some effort to perform this task independently as they may need help from the library's resources, even if they can use search engines to locate relevant articles or the electronic library system.

Definitions of Proficient Performance in Key Areas of Information Literacy:

These five requirements for information literacy in higher education were accepted by the American Association for Higher Education in 1999.

- 1) The first stage is figuring out what data is required, and the second is figuring out how to get your hands on it;
- 2) Evaluating the information and its sources and integrating the knowledge and values of the information chosen into the student's worldview;
- 3) Using information effectively to accomplish a specific purpose, whether working alone or in a group, and
- 4) Understanding most of the issues surrounding the uses and access to information (American Library Association. 2006).
- 5) students will have a solid understanding of the economic, legal, and societal challenges related to the appropriate and ethical application of information. Step one is locating the relevant data needed on time.

Thus, the outcomes and performance indicators that should be included in each of the five criteria are listed in detail.

The Australian and New Zealand Institute for Information Literacy (ANZIIL) updated the first edition of the Information Literacy Standards in 2001. The initial version was updated to account for how academics and librarians have used it. Here are the six indicators of information literacy that they advocated (Bundy, 2004):

The first criterion for information literacy is assessing one's information needs and identifying appropriate sources.

Second Information Literacy Standard: Finding relevant information quickly and efficiently.

Third Information Literacy Standard: An informed citizen critically analyses information and the research process.

Fourth, one who is "information literate" can handle the creation or maintenance of large amounts of data.

According to the fifth standard, an information-literate individual uses new knowledge to form novel ideas or improve existing ones.

Knowledge of the cultural, ethical, economic, legal, and social issues related to information use is essential to information literacy. We are now on the sixth norm. A person who is information literate can identify a need for information, assess how much information is needed, locate relevant information quickly and easily, evaluate the credibility and usefulness of the information and its sources, organise, store, manipulate, and rewrite information that has been gathered or created, apply what they've learned from applying information, use the information to their advantage, and grow their own body of knowledge.

Informational and citation literacy currently needs to be improved. Although citation patterns in major composition studies journals and books published between the late 1980s and the early 2000s differ significantly from those in other social science

and humanities fields, this point, which refers to intellectual property, is one of the most important critical issues that students in higher education need to consider when working on their papers.

2. Literature Review

According to Alqudsi-ghagra and Al-Dousari, librarians and information professionals have long tried to develop efficient methods for imparting information literacy and technical competence. Despite the widespread belief that today's first-year college students grew up with advanced technology, an honest evaluation of their IL and TL might reveal otherwise. Hebert and Rouge note the necessity for a more extensive, multi-institutional study using a validated instrument to collect data and derive generalizable findings on incoming LIS graduate students' IL self-efficacy and ability.

According to Merkley, her research will be utilized to develop an online information literacy screening tool that incoming college students may use to identify areas in which they may benefit from further support as they acclimate to university life.

Kimani and Onyancha discuss this same issue in First-year students at the Kenya's Catholic University of Eastern Africa were the focus of this research, examining their information literacy skills and understanding (CUEA). The majority of first-year students (c) did not know how to use any of the available retrieval tools, (d) were already familiar with both electronic and print information resources, and (e) were proficient in using a variety of computer programs, including the internet and its many applications (such as social networking sites and websites), word processing, and statistical analysis software.

Miller describes Purpose in great depth. This study aims to evaluate the influence of demographic variables on the information literacy levels of entering information studies graduate and undergraduate students. Research indicates that graduate students may have greater information literacy than undergraduates. In the undergraduate population, older students fared better, and many respondents may lack "basic" information literacy skills despite ubiquitous use. These findings prompt educators and librarians to investigate information literacy gaps among college and university students.

In their article, Pinto, Fernandez-Pascual, and Puertas discuss that Data for this study on information literacy came from surveys and in-depth interviews with Spanish college students with backgrounds in information studies, psychology, and translation and interpretation. The IL-HUMASS (subjective) and EVALCI-K (objective) questionnaires were used to compile the data. Searching for information, analyzing it, synthesizing it, and sharing it are the four main components of information literacy (IL), further subdivided based on objective and subjective standards. Objective (knowledge and skills) and personal (belief-unimportance and self-efficacy) values can be integrated concerning IL competencies, potentially leading to a better understanding of the teaching and learning processes and a more thorough incorporation of them into the curricular framework—analysis of observable and hidden competency patterns, including correlation and causality.

The authors, Ebiefung and Onah, claim to have undertaken an empirical investigation of students' digital literacy skills to test the hypothesis that students' levels of digital literacy influence the extent to which students at Nigerian institutions use digital information resources. This research looks at how college students use online libraries and databases, the challenges they confront while attempting to increase their digital literacy, and how much they have succeeded.

Cunningham and Anderson were the ones For Sonoma State University's Advanced Accounting class; the opportunity to create an information literacy teaching module emerged out of the need to help students become more critical thinkers and the complexity of the accounting literature. The course taught students to recognize good accounting literature, where to get it, how to use search engines successfully, how to evaluate the authenticity of material discovered online, and how to combine all that to solve an accounting problem. This curriculum was developed with the help of your accounting professor using a case study methodology. Three successive semesters were employed to roll out the module. Students were polled before and after the exercise to see if they had any background expertise in locating specialized accounting documents and, if so, if they had changed their search tactics.

The information needs of graduating Nigerian undergraduates at the University of Ilorin are investigated, as are the students' levels of acquaintance with IL courses, the strategies they employ, and the hurdles they face on their way to becoming informational literate. The findings suggest that IL be made available for credit to first-year students at the institution.

Information literacy (IL) in the workplace is examined through the eyes of Kiran and Jinadu as full-time faculty members (college

context). With a focus on a qualitative case study, it adopts a pragmatic approach. Conclusions The results of this tracer study demonstrate the need for more research into the factors affecting graduates' (workers') performance on the job. According to Amu et al., this research looked at how computer literacy, user education, and internet search skills affect undergraduates' usage of e-resources in the libraries at Al-Hikmah University. Facilitators of user education are urged to ensure that users have access to the requisite computer literacy and internet search skills, as suggested by the study. Students at Al-Hikmah University should be making more use of online materials, and there are many issues that the school's administration and library should seek to fix.

There is a gap on the road between Ebiefung and Onah. This article discusses how academic libraries might better serve their diverse user bases by purchasing and supplying digital materials. Helpful Internet resources for the classroom, the library, and the lab are explored, including e-books, e-journals, e-encyclopedias, online abstracts, compact discs, digital libraries, electronic newsgroups, and electronic databases.

According to Igwe and Issa, Finding, assessing, and utilising information from many sources effectively for decision-making and issue-solving are all skills under the umbrella of "information literacy" (IL). What we mean by "information literacy" (IL) is the ability to identify relevant information needs, locate appropriate resources, evaluate them, and ethically synthesize the findings. Access to materials and the means through which those resources are disseminated affected competency. It suggested boosting them, increasing student awareness of the importance of IL and creating a framework for IL competency at institutions across Southern Nigeria.

Premarathne's Electronic Information Resources (EIR) explains how essential reference resources provided by university libraries are in today's information landscape. Readers are encouraged to use digital resources as part of their academic research. While in university, most students make substantial use of the library, particularly senior-year students working on capstone projects. According to the findings, the low rates of student use of electronic resources may be attributed to a lack of foundational IT skills and understanding and a problem communicating in English. By creating awareness campaigns, encouraging students to use EIRs, and building new infrastructure in the Main Library, university libraries and faculty members may play a crucial role in maximising the benefits of electronic information resources. It is advised that a course in information literacy skills be implemented into students' regular curriculum to maximise the return on investment (ROI) from EIR.

Pinto et al., in the article, describe how a wide range of first-year college students feel about the importance of information literacy (BILAs). The first objective is to find out whether there is a generic latent structure, and the second is to find out if there are any differences related to demographics. The results stress the need to account for variations in education level, central, and sex. Value/originality: Despite the abundance of literature on the topic, we have yet to learn how highly students regard information literacy. To that end, the BILAs framework was developed.

Higher education has recently seen a dramatic shift, with a new focus on the need for open communication lines and technological advancement. First-year college students are responsible for learning how to find and evaluate knowledge from various sources beyond the bookshelves of a library. The educational system is responsible for ensuring that these students have the tools they need to do so.

The concept of "information literacy" has spread beyond the realm of academia and into everyday life. "Information literacy, starting with the emergence of information technology in the early 1970s," writes Bruce (2004). "Has developed, shaped, and reinforced to become recognised as the crucial literacy for the twenty-first century." One of a college education's most important building blocks is this. In 2000 "Investigations into the topic of literacy" were still in their infancy. However, there is still a dearth of research focused on a single domain, and the existing studies are all over the place."

Hepworth (1999) analysed undergraduates' information literacy and skills to identify areas of strength and improvement. Findings indicated that students needed to have adequate information literacy or abilities. The Information Literacy Competency Framework was proposed by researchers at Singapore's Nanyang Technological University. The implications of these alterations and a transitional framework were articulated. Adapting to these modifications

In his 2003 article, "The New Information and Educational Environment in China," Sun addressed the burgeoning demand for academic expertise in China. Information literacy and 21st-century skills are being produced in today's higher education graduates. With the rise of China's information society, information literacy is being taught in classrooms nationwide. Still, more needs to be done to streamline the educational process and include training in information skills.

First-year students have a hard time effectively using libraries and often lack need more skills d the information they need. The information literacy of first-year college students in Quebec was investigated by Mittermeyer and Quirion (2003). The study's findings backed up the importance of college libraries as a resource for fostering information literacy and the need to incorporate it into curricula. The research shows that students struggle to get more background knowledge in these areas to improve with information retrieval, time management, and plagiarism prevention 2005 article, Jager and Nassimeni discussed the efforts of librarians and academics to work together to improve teaching and learning in South African universities and colleges. Their research demonstrated librarians' evolution of a theory of information literacy instruction. They argued that librarians could hasten the adoption of the curriculum by capitalizing on policy initiatives already in place in higher education.

The Arab world has shown some interest in Information Literacy through IT skills in the context of e-learning and the integration of new technologies like the Internet. Since educators are the focus, the study's findings of a lack of IT skills and e-learning applications would only be meaningful if teachers already possessed those abilities and accepted integration.

3. Statement of the Problem

In this study, students at Sargodha University (UOS) were assumed to be unable to locate, comprehend, or assess information. Therefore, this research aims to determine students' information literacy at Sargodha University by investigating the following issues.

- 1. Can English Language majors in their first year at UOS determine what kind and how much data they'll need?
- 2. Do first-year English majors at UOS employ efficient and productive search methods?
- 3. What kinds of papers are verified by English major first-year students at UOS?
- 4. Which search engines do first-year English majors at UOS trust the most while researching?
- 5. How well-versed are first-year English majors at UOS on the ethical and legal considerations surrounding data collection, storage, and dissemination?

4. Research Methodology

As this research was done in the form of a descriptive study, the researchers used a questionnaire to collect information about students' familiarity with various forms of information.

The Study Sample

For this research, we recruited 170 freshmen majoring in English literature from Sargodha University's Registration Department. Even though the survey was sent to all students, just 160 responded.

4.1. The Ouestionnaire

After translating its questions into English, this study utilizes a questionnaire developed by (Mittermeyer & Quirion. 2003) that

Gender	Frequency	Percent
Male	85	63.1
Female	75	46.9
Total	160	100

Table 1. Sample distribution according to their gender

represents information literacy abilities and norms. Four UOS judges with doctorates in various fields checked the English version for accuracy: instructional technology, information technology, curriculum and instruction, and library science. After the study, the researchers used Cronbach's Alpha (.878) to determine the reliability of the questionnaire's 40 items. These questions were developed and Information Literacy Competency Standards for Higher Education (ACRL). The following table shows how such abilities were connected to factors organised into five broad categories (table 2).

Themes	Variables	Questions
Concept Identification	Significant Words	6,10 and 15
Document Types	Periodicals Scholarly Encyclopedias	17 22 5
Search Strategy	Boolean Operators Translation into keywords Search Indexes Controlled Vocabulary	11 and 18 4 13 14
Use of Results	Evaluation Information Ethical use of information Bibliographies Read in Citations	20 21 12 7
Search Tools	Meta-search Engine Library Catalogues Search Engines Databases Catalogue	16 9 8 3 19

Table 2. Distributed Questionnaire items onto their themes and variables

5. Results

6

The study questions were framed around five topics that capture information competencies and standards to assess the level of information literacy and abilities among UOS students.

Findings from the first inquiry: Can English Language majors in their first year at UOS figure out what kind and how much data they'll need?

Using the key terms in the inquiry, this question indicates students' abilities in Concept Identification. The reasons for having the students respond to Questions 6, 10, and 15

Selecting and using appropriate terminology in the issue statement is of fundamental importance, as is being able to answer question 6 of the purpose section.

With Q10, you may narrow your search by emphasising keywords for more relevant results.

Using the student's ability to conceptually separate oneself from the problem's formulation in the description of the problem and the selection of search terms,

Q15 serves as a measure of this. The tabular data (3) displays the pupils' answers to these inquiries:

			M	ale			Fema	le		Total			
		C.A		I.C.A		C.A		I.C.A		C.A		I.C.A	
		F	%	F	%	F	%	F	%	F	%	F	%
Q6	A	28	33	57	67	20	27	55	73	48	30	112	70
Q 10	В	29	34	56	66	37	50	38	51	66	41	94	59
Q15	D	27	32	58	68	30	40	45	60	57	36	103	64
N	l ean	28	33	57	67	29	39	46	61	57	36	103	64

Table 3. Responses of Students at Theme1: Concept Identification

Q.A: Question Answer; C.A: Correct Answer; I.C.A: Incorrect Answer; F: Frequency

Taken out of consideration:

- 1. 64 percent of students got the question wrong, and just 36 per cent knew the key terms to use in a Google search to find solutions to the problem.
- 2. The mean proportion of accurate answers among male students was 33%, whereas the mean percentage among female students was 39%.
- 3. Just 36% of first-year English majors at UOS can assess the scope and dep the data required.

The answers to the second question are: Do English Language majors at UOS employ efficient and productive search methods?

A student's proficiency with the Search Strategy standard is revealed in this question by using the following search-related variables: problem-specific controlled vocabulary, Boolean operators, search indexes, and translated keywords. It was requested of the pupils that they respond to questions 4, 11, 14, and 18. The students' answers to these questions are shown in Table (4)

		Male					Fem	ale		Total			
Q.N	Q.A	(C.A I.C.A		C.A	C.A		I.C.A		C.A		I.C.A	
		F	%	F	%	F	%	F	%	F	%	F	%
Q 4	В	36	42	49	58	13	17	62	83	49	31	111	69
Q 11	D	25	29	60	71	24	32	51	68	49	31	111	69
Q13	C	33	39	52	61	45	60	30	40	48	30	82	51
Q 14	C	19	22	66	78	33	44	42	56	52	32	108	68
Q 18	С	10	12	75	88	29	39	46	61	39	24	121	76
Mea	ın	25	29	60	72	29	38	46	62	47	30	107	67

Table 4. Responses of Students at theme 2: Search Strategy

One may deduce the following from the data in the table:

- 1. Roughly 67% of students needed to learn the correct answer; just 30% of students used an efficient and successful search technique to find data relevant to the problem.
- 2. No search techniques exceeded 50% of accurate answers, with male students accounting for 29% and female students 38%.
- 3. Just 30% of first-year English majors at UOS employ optimal search tactics.

Results of Question #3: Which Types of Documents Are Accepted by First-Year English Majors at UOS?

Student proficiency with the Document Categories standard is shown here by asking them to seek examples of the three types of validated documents: encyclopedias, periodicals, and scholarly articles. The class was given questions 5, 17 and 22. Table 5 indicates how the pupils fared in answer to those inquiries.

		Male				Female				Total			
Q. N	Q. A	C.A I.C. A		C.A		I.C. A		C.A		I.C. A			
		F	%	F	%	F	%	F	%	F	%	F	%
Q 5	B: An encyclopedia	23	27	62	73	26	35	49	65	49	31	111	69
Q 17	D: A journal	19	22	66	78	18	24	57	76	37	23	123	77
	Mean		25	64	76	22	30	53	71	43	27	117	73

Table 5. Students' Responses to Theme 3: Document Types

Based on the data in the table, we may infer the following:

- 1. Roughly 73% of students needed to learn the correct solution, and only 27% selected the correct document source that had material directly relevant to the problem.
- 2. The average proportion of male students who got it right was 25%, whereas the average percentage of female students who got it right was 30%. Students were asked to describe articles published in academic journals for Question 22; the correct responses were b, c, and d, and their ability to tell the difference between scholarly journals and popular magazines was tested.

Table (6) shows that just two students correctly identified the characteristics of the academic journal by selecting solutions (a), (b), and (d). In contrast, the majority correctly identified their level of expertise by selecting response (f), "Don't Know."

Tables 5 and 6 show that first-year English majors at UOS need help identifying the kind of verified document given its source, as measured by the Document Types standard, to identify the kind of verified document.

Results of question 4: Do first-year English majors at UOS prefer one particular search engine over another?

Knowing that search engines are not suitable tools for searching indexes and utilising the Internet as a search tool is a key indicator of how well students can use the standard of reliable search tools in answering this issue. In this exercise, the students were given questions 3 through 19.

Out of the table:

From the data:

- 1 Roughly 68% of students got the question wrong, while just 32% used the appropriate search engine.
- 2 Male and female students had similar correctness rates, at 32% overall.

Students have been asked Question 19 to test their knowledge of how to use the library catalogue, and the correct responses are A and D.

Que	stions	Alteri	natives	S		Responses	%
					F	21	13.2
				Е		19	11.9
		С	D			13	8.2
	В	С				15	9.4
A	В	С				18	11.3
A			D			11	6.9
						10	6.3
		С	D	Е		8	5
A	В		D			6	3.8
	В					9	5.6
	В					8	5
A		С	D			7	4.2
A		С				7	4.2
A	В		D			8	5
		To	tal			160	100

Table 6. responses of Students at theme 22

		M	Female				Total						
Q.N	Q.A	C.A		I.C.A		C.A		I.C.A		C.A		I.C.A	
		F	%	F	%	F	%	F	%	F	%	F	%
Q 3	В	33	39	52	61	22	29	53	71	55	34	105	66
Q 8	A	21	25	64	75	25	33	50	67	46	29	114	71
Q 9	A	26	31	59	69	19	25	56	75	45	28	115	72
Q 16	A	31	36	54	64	30	40	45	60	61	38	99	62
Mean		28	33	57	67	24	32	51	68	52	32	108	68

Table 7. Responses of Students at theme 4: Search Tools

Table 8 reveals that just 7.5% of students selected answers A and D, which explain how to use the library's catalogue to find books and periodicals.

According to the data in Tables 7 and 8, first-year English majors at UOS need to be more capable of meeting the standards of unsuitably reliable search engines.

According to the Fifth Question: How well do first-year English majors at UOS grasp the economic, legal, and social consider

Qu	estio	ns Al	ltern	ative	S	Responses	%
A			D			12	7.5
	В	С				22	13.7
	В					27	16.9
		С				19	11.8
						11	6.8
	В	С				13	8.1
		С	D			10	6.2
A	В	С	D			8	5
A	В					7	4.3
		С	D			6	3.7
	В					6	3.7
	В					8	5
					F	4	2.5
A						4	2.5
A	В					3	1.8
	T	otal			160	100	

Table 8. Responses of Students at theme 19

ations associated with information's ethical and legal use?

This question reveals students' proficiency with the Use of Results criteria by testing their familiarity with reading in such areas as citation, bibliographies, evaluative information, and ethical use of information. A total of 21 questions were provided to the students to answer. Thus, Question 7 is designed to test takers' ability to analyse a bibliographic citation and determine what kind of document it refers to, while Question 12 is meant to gauge whether or not readers like the author's use of a particular set of sources. The table below displays the results of the first two questions asked to the students in Table (9).

0.11			Ma	ale			Fen	nale		Total			
Q.N	Q.A	C.A		I.C.A		C.A		I.C.A		C.A		I.C.A	
			%	F	%	F	%	F	%	F	%	F	%
Q 7	В	24	28	61	71	23	30	52	69	47	29	113	71
Q 12	С	27	31	58	68	33	44	42	56	60	38	100	63
Me	an	26	30	60	70	28	37	47	63	54	33	107	67

Table 9. Responses of Students at theme 5: Use of Results

- 1. As you can see from the data, the majority of students (67%), especially those who selected the correct citation and bibliography style (33%), got it wrong.
- 2. Similarly, 33% of students overall had a right mean response, which was true for both male and female students.

Students are expected to be able to analyse material given to them, and the responses to Questions 19 (A and D) will reveal this.

(Quest	tions	Alter	nativ	es	Responses	%
A	В	С				11	6.8
			D			12	7.5
	В					23	14.4
					F	25	15.6
	В	С				12	7.5
A		С	D			12	7.5
						6	3.7
		С	D	Е		7	4.4
	В					6	3.7
		С				6	3.7
A	В					9	5.6
A	В	С	D			3	1.8
			D			7	4.4
	В	С	D			9	5.6
	В					6	3.7
A	В	С				6	3.7
		То	tal			160	100

Table 10. responses of Students at theme 20

Que	stions	s Alte	rnativ	ves		Responses	%
			D			22	13.7
		С				21	13.1
					F	14	8.7
		С				23	14.4
	В					15	9.4
			D			11	6.8
				Е		16	10
	В	С				7	4.5
		С	D			8	5
A	В		D			3	1.9
			D	Е		3	1.9
A	В					5	3.1
			D	Е	F	6	3.7
A	В	С				3	1.9
	В		D			3	1.9
		To	tal			160	100

Table 11. Responses of Students at theme 21

Only 6.8% of students got it right by choosing options A, B, and D and providing the correct publication date; thus, the author is well-known in the subject, and authority over the site is unmistakable. Nonetheless, 15.6 per cent of the class needs to be more knowledgeable. Students were tested on their knowledge of the principles of the ethical use of information by being presented with Question 21, the correct answers to which were A, B, C, and D.

Only three students showed a command of the concepts of responsible research usage by choosing all three correct options. Tables 9, 10, and 11 show that first-year English majors at UOS need a better grasp of their information practices' ethical, legal, and societal implications.

It's important to note that no students provided feedback on the "other" answer choice.

6. Discussion and Conclusion

When comparing the findings of this study to those of Mittermeyer and Quirion, it is obvious that there needed to be more standards among UOS students concerning Information Literacy (2003). Therefore, it's doubtful that the students who participated in the study had a firm grasp of either how to locate reliable sources or the nature of legal concerns. To restrict their search results, they employ Boolean Operators, but they get OR and AND mixed up.

This research aims to determine whether first-year college students have a sufficient grasp of information to complete the questionnaire's tasks if they correctly answer more than half of the questions. Without using Chi-Square, a comparison of male and female students will appear to have the same distribution. That's why trying to conclude by comparing male and female answers is pointless.

Some students needed help to grasp the significance of these abilities, and some educators bear the blame for the lack of information literacy in Jordanian classrooms. Despite the popularity of new approaches to education—from group projects to written reports—few Jordanian schools have implemented digital libraries.

Overall, English majors at UOS need help identifying the concept under search, developing a search strategy, trusting what is written on the Internet, using results relevant to the topic or problem under search, and comprehending the law.

7. Recommendations

The following are the suggestions made by the researchers based on the findings and the outcomes of the study:

- 1. Designate time for a stand-alone Information Literacy course or incorporate it into existing lessons.
- 2. Prepare a printed and digital brochure on Information Literacy or hold workshops for first-year undergraduates to help them learn about and develop these skills, and then include them in the university's required orientation period for new students.

References

- [1] Alqudsi-ghabra, T., & Al-Dousari, E. (2014). Internet Use Among Incoming Undergraduate Students of Kuwait University. *Journal of Information & Knowledge Management*, 13(2), 1. https://doi.org/10.1142/S0219649214500178
- [2] American Library Association (2006) "Information Literacy Competency Standards for Higher Education", September 1, 2006. http://www.ala.org/acrl/standards/informationliteracycompetency (Accessed April 26, 2013) Document ID: efeb57df-7090-e1d4-558f-d59c7537f9c7
- [3] Amuda, H. O., Abdul, H. A., Kehinde, A. A., & Onanuga, A. O. (2020). Computer Literacy, User Education and Online Searching Skills: Predictors for Undergraduates' Use of E-Resources in Al-Hikmah University. *Mousaion*, 38 (1), 1–18. https://doi.org/10.25159/2663-659x/7311
- [4] Bruce, Christine S. (2000) Information literacy research: dimensions of the emerging collective consciousness. Australian

- [5] Bruce, Christine S. (2004) Information Literacy as a Catalyst for Educational Change. A Background Paper. In Danaher, Patrick Alan, Eds. *Proceedings "Lifelong Learning: Whose responsibility and what is your contribution?"*, the 3rd International Lifelong Learning Conference, pages pp. 8-19, Yeppoon, Queensland.
- [6] Bundy, Alan. (2004). Australian and New Zealand Information Literacy Framework: principles, standards and practice. Second edition. http://www.library.unisa.edu.au/learn/infolit/Infolit-2nd-edition.pdf
- [7] Coffey, Daniel P. (2006). A Discipline's Composition: A Citation Analysis of Composition Studies. The Journal of Academic Librarianship. Volume 32, Issue 2, March 2006. Pages 155-165. http://www.public.iastate.edu/~dcoffey/disccomppdf.pdf
- [8] Cunningham, N. A., & Anderson, S. C. (2005). A Bridge to FARS and Information Literacy for Accounting Undergraduates. *Journal of Business & Finance Librarianship*, 10(3), 3–16. https://doi.org/10.1300/J109v10n03 02
- [9] Ebiefung, R., & Onah, E. (2021). digital literacy skills as correlate of electronic information resources' (eirs) use by university undergraduates in southsouth, nigeria. *Library Philosophy & Practice*, 1–16.
- [10] Ebiefung, R., & Onah, E. (2021). digital literacy skills as correlate of electronic information resources' (eirs) use by university undergraduates in southsouth, nigeria. *Library Philosophy & Practice*, 1–16.
- [11] Hebert, A., & Rouge, B. (2018). Information Literacy Skills of First-Year Library and Information Science Graduate Students: An Exploratory Study. *Evidence Based Library & Information Practice*, *13*(3), 32–52. https://doi.org/10.18438/eblip29404
- [12] Hepworth, Mark. (1999) 'A study of undergraduate information literacy and skills: the inclusion of information literacy and skills in the undergraduate curriculum'. *Proceedings of the 65th IFLA Council and General Conference, Bangkok, Thailand, August 20-August 28, 1999*. Available at: http://www.ifla.org/IV/ifla65/papers/107-124e.htm. (Accessed 1 May 2013).
- [13] http://eprints.qut.edu.au
- [14] Igwe, K. N., & Issa, A. O. (2017). Accessibility of Resources and Delivery Methods as Correlates of Information Literacy Competence of Undergraduates in Southern Nigerian Universities. *African Journal of Library, Archives & Information Science*, 27(2), 159–174.
- [15] Issa, A. O., Amusan, B. B., Olarongbe, S. A., Igwe, K. N., & Oguntayo, S. A. (2015). An assessment of the information literacy competence of undergraduate students at the University of Ilorin, Kwara State, Nigeria. *Annals of Library & Information Studies*, 62(2), 68–76.
- [16] Jager, Karin De and Nassimbeni, Mary. (2005). Information Literacy and Quality Assurance in South African Higher Education Institutions. *International Journal of Libraries and Information Services* (Libri), 2005, vol. 55, pp. 31–38. http://www.librijournal.org/pdf/2005-1pp31-38.pdf
- [17] Jinadu, I., & Kiran, K. (2016). Practices leading to information literacy development among Nigerian undergraduates. *Malaysian Journal of Library & Information Science*, 21(1), 109–121. https://doi.org/10.22452/mjlis.vol21no1.7
- [18] Kimani, H. N., & Onyancha, O. B. (2015). Information literacy skills among incoming first-year undergraduate students at the Catholic University of Eastern Africa in Kenya. *Innovation* (10258892), 51, 22–45.
- [19] Marais, J. J. (1992). Evolution of information literacy as product of information education. South African Journal of Library and Information Science. 60(2), 75-79
- [20] Merkley, C. (2014). First Year University Students Arrive with Some Search Skills, But Struggle with Scholarly Sources. Evidence

Based Library & Information Practice, 9(2), 22–24. https://doi.org/10.18438/B88C9F

- [21] Miller, R. E. (2014). Graduate Students May Need Information Literacy Instruction as Much as Undergraduates. *Evidence Based Library & Information Practice*, 9(3), 104–106. https://doi.org/10.18438/B8BG7B
- [22] Mittermeyer, D. & Quirion, D. (2003). Information literacy: study of incoming first-year undergraduates in Quebec. Canada, CREPUQ. Retrieved March 12,2013:
- [23] Pinto, M., Caballero, D., Sales, D., & Segura, A. (2020). Belief in importance of information literacy abilities among undergraduates. Underlying factors and analysis of variance. *Reference Services Review*, 48(4), 559–577. https://doi.org/10.1108/RSR-03-2020-0020
- [24] Pinto, M., Fernandez-Pascual, R., & Puertas, S. (2016). Undergraduates' information literacy competency: A pilot study of assessment tools based on a latent trait model. *Library & Information Science Research (07408188)*, 38(2), 180–189. https://doi.org/10.1016/j.lisr.2016.05.004
- [25] Premarathne, S. (2017). Use of Electronic Information Resources by Arts Undergraduates during the Preparation of Final Year Dissertations: A Study at University of Peradeniya. *Journal of University Librarians Association of Sri Lanka*, 20(2), 59–69. https://doi.org/10.4038/jula.v20i2.7901
- [26] Shipiro, Jeremy and Hughes, Shelley. (1996). Information Literacy as a Liberal Art. Shapiro, Jeremy. J. and Hughes, Shelley. K. 1996. Information technology as a liberal art Enlightenment proposals for a new curriculum. Educom Review 31(2).http://www.ogs.edu/resources/docs/library/infolit.pdf
- [27] Sun, Ping. (2003). Information Literacy in Chinese Higher Education. LIBRARY TRENDS, Vol. 51, No. 2, Fall 2002, pp. 210–217. http://cdigital.uv.mx/bitstream/123456789/6047/1/Information.pdf
- [28] Tuhairi, Wafa. (2011). The reality of having faculty members to use information technology skills, to accept the idea of integrating e-learning at the University of M'sila. Unpublished Master thesis. Hadj-Lakhader- Batna University. Algeria.
- [29] www.crepuq.qc.ca/documents/bibl/formation/studies Ang.pdf.