

Information Literacy Practices and Challenges of Academic staff in Ethiopian Selected Public Research Universities

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Abstract

This study aims to explore the Information Literacy Practices and Challenges faced by academic staff in selected Ethiopian Public Research Universities. The study population comprises 8074 academic staff members from four prominent research universities, accounting for 45% of the total. Specifically, this research will focus on universities located in Addis Ababa, Gonder, Haromaya, and Hawasa, encompassing a total of eight public research universities. A sample of 367 academic staff members will be considered for this study. To achieve this objective, a descriptive cross-sectional research design will be employed. Data will be collected through the use of questionnaires, focus group discussions, and relevant documents pertaining to the subject matter. The ultimate goal of this research is to formulate effective strategies that can be implemented by higher education institutions in Ethiopia. These strategies aim to enhance existing practices or introduce and cultivate Information Literacy (IL) programs that empower instructors with the knowledge and skills essential for navigating the modern information landscape and promoting lifelong learning. Given the absence of a comprehensive study addressing the nature and scope of library instruction and information literacy programs in Ethiopian universities, this study endeavors to bridge this gap. It will critically examine the status and implementation of information literacy, serving as a foundation for advancing quality education and cultivating skills conducive to effective teaching and learning in Ethiopian universities. Data collected will be analyzed using descriptive and inferential statistics, including measures such as mean, standard deviation, and one-way ANOVA. Finally, the study's key findings will be summarized, leading to conclusive remarks and the formulation of potential solutions based on these findings.

Keywords: Information Literacy, Research Universities, Academic Staff

1. Introduction

Information literacy: a crucial skill for the modern world the concept of knowing how to find and use information effectively dates back to 1974 and the work of Paul G. Zurkowski. Today, it's more relevant than ever. While terms like "user education" existed, "information literacy" has become the preferred umbrella term, encompassing various skills like critical thinking and source evaluation. Organizations like the American Library Association recognize its importance

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as a fundamental right in today's information-driven society. Information literacy empowers individuals to navigate various aspects of life, from making informed health decisions to achieving personal and professional goals. It allows people to critically analyze information, become responsible information creators, and actively participate in society. This skill goes beyond traditional library skills, encompassing areas like digital literacy and media literacy. This multidisciplinary field continues to evolve, addressing the demands of our information-rich world. From understanding online sources to evaluating scientific research, information literacy equips individuals with the tools to thrive in the 21st century (Karisiddappa et al., 2020).

Since 2000, information literacy has gone through significant changes. While universities made progress integrating these skills into learning, the fast-paced academic world and evolving information landscape require a fresh look at its core concepts. Everyone involved in researching and using information (academics, students, researchers) needs to understand its dynamics and ethical use better. Specifically, professors need to design courses that encourage deeper understanding of information and scholarship within their fields. Librarians, on the other hand, should highlight essential ideas in their area to enhance student learning and create a unified information literacy curriculum (Beilin, 2015).

Universities need to quickly update how students learn because technology is changing so fast. Different tools can be used in education to communicate and share information. One powerful way to improve learning is through e-learning, which uses technology and the internet to deliver education online (Setyoko et al., 2023). Students can access, manage, organize, and evaluate their learning online using e-learning tools (Maphosa & Bhebhe, 2019). This makes learning more efficient and enjoyable, and helps students find information for things like lectures, assignments, research, and more (Yudiawan et al., 2022).

In today's digital age, information literacy isn't just a library concern; it's a critical issue for everyone on campus. From leaders and teachers to librarians and tech experts, assessment specialists and learning developers, student support and even career guidance – all stakeholders have a vital role to play. In the 21st century, we must work together to equip our students with the skills they need to navigate the information flood effectively, regardless of their field or future path.

Ethiopia is a country that is on a journey to its renaissance targeting at achieving peace, unity-with-diversity, broad and rapid socio-economic growth, establishment of democratic systems and good governance. The Government has been engaged in a major effort to transform Ethiopian society and place the country on a trajectory to become a lower middle income economy by the year, 2030. Over the last several years, the economy grew by nearly 10 per cent per annum, one of the fastest growth rates registered in the world. During this time, significant attention has been given to upgrading economic and social infrastructure and promoting pro-poor spending on education, health, and other services to benefit the poor and the marginalized (MoE, 2018).

Librarians in Ethiopia, akin to their counterparts in other countries, bear the responsibility of educating information users, not only to enhance the effective utilization of information resources available in libraries and information centers but also to equip them with knowledge

and skills befitting the information age. To achieve this, effective planning leading to the successful implementation of viable Information Literacy programs is imperative (Mammo, 2011). In this regard, this study is considered highly relevant and potentially significant for higher learning institutions in Ethiopia.

Statement of the problem

In Ethiopian universities, it is evident that only a small percentage of academic staff makes use of the library, often influenced by faculty expectations. Some encounter difficulties in discerning available information; struggle to determine its relevance and quality, and face challenges in comparing and evaluating alternative sources. Therefore, it is imperative for librarians to collaborate closely with academics. Moreover, comprehensive information literacy instructions are not uniformly implemented in all academic libraries. Few universities offer the necessary lectures that enlighten academic staff on the significance of libraries, including their departments, and provide practical training for accessing databases online. In conclusion, in many Ethiopian universities, information literacy is not formally integrated into the curricula of general education.

This study is focused on exploring Information Literacy practices and challenges faced by academic staff in selected Ethiopian Research Universities. The study aims to identify strategies and approaches that can be implemented to introduce and develop effective Information Literacy programs in higher education institutions in Ethiopia.

2. Literature Review

2.1 The Background of Information Literacy

"Debates surrounding the definition of 'information literacy' (IL) have existed since the term's introduction to the library and information science (LIS) field in 1974. Coined by Paul Zurkowski, the term initially focused on information skills used in workplaces (Zurkowski, 1974). While it quickly became adopted by LIS professionals, its meaning gradually shifted within the higher education context. Initially encompassing broader information usage skills, it narrowed down to skills specifically used in academic and research settings. Before 2015, most discussions within higher education relied on the ACRL's Standards, guidelines based on the American Library Association's 1989 definition of IL (Kanal et al., 2013) ". Today's online world offers a vast ocean of information in countless formats. But this abundance, ironically, creates a major challenge: information overload. The internet and technology rapidly pump out information, spreading it far and wide. While much of it is valuable, this "information explosion" also includes unreliable or even false content. This makes it difficult for everyone, from beginners to experts, to find the resources they need for learning, research, and teaching (Moshinsky, 2018).

Hence, possessing information literacy skills is imperative for responsibly, critically, and objectively utilizing information. These skills enable effective and efficient information acquisition, analysis, and evaluation, instilling confidence in decision-making and content creation (Chakravarty & Librarian, 2008). For academic staff, information literacy equips them

with the capabilities to source the most current and authoritative information to enhance their effectiveness in their roles.

2.2 The concept of Information Literacy

The American Library Association defines information literacy as "a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information" (Rintamäki & Lehto, 2018).

The Alexandria Proclamation on Information Literacy and Lifelong Learning (Chakravarty & Librarian, 2008) emphasizes that Information Literacy is fundamental to lifelong learning, empowering individuals to seek, evaluate, use, and generate information effectively to achieve personal, social, occupational, and educational goals. It is a fundamental human right in the digital era and fosters the social inclusion of all nations (Lehmann & Locke, 2005) and (Landøy et al., 2020) presented the concept of Information Literacy (see Figure 1: Concept of Information Literacy).

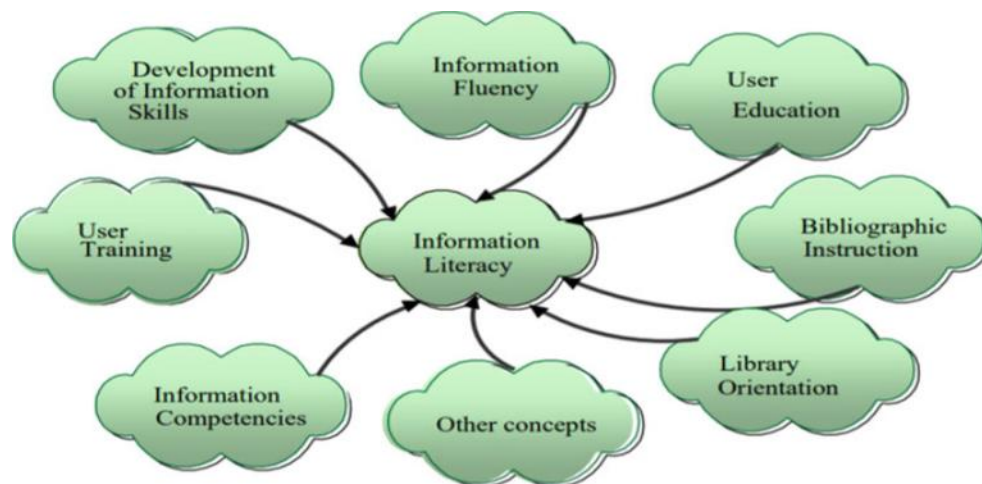


Fig. 1 Concept of Information Literacy

The CILIP (UK) Information Literacy Group updated (Secker, 2018) the definition of Information Literacy: a) emphasizes critical thinking and discernment, b) reflects more nuanced definitions of recent years, c) focuses on context, individual agency, and citizen empowerment, and rejects generic sets of skills and abilities to be acquired.

The evolution of information literacy in academic libraries has surpassed bibliographic and library instruction. Its origins can be traced back to the late 19th and early 20th centuries when academic librarians recognized the importance of equipping students with the skills to effectively utilize libraries and their resources as integral components of academic learning and education. With the advent of the internet and other information technologies, the teaching and integration of information literacy into the classroom have become essential for student success, lifelong learning, and achievement in higher education institutions.

Academic libraries have transformed information literacy from mere library instruction into a powerful skillset for navigating the information landscape. Pioneering librarians in the late 19th and early 20th centuries recognized the need for students to master library resources, laying the groundwork for today's comprehensive approach. The explosion of the internet and information technology demanded a shift. Information literacy instruction now extends beyond library walls, equipping students to critically evaluate and utilize information effectively across all formats, online and offline. This evolution, driven by technology and a focus on lifelong learning, empowers students to excel not just in their academic journey, but also in a world brimming with information.

2.3 Need of Information Literacy Skill

Learning how to find and use information effectively isn't just about libraries duty anymore. Information literacy (IL) equips you to conquer the vast information landscape, from books and websites to social media and community resources. But with so much unfiltered information out there, knowing what's true and reliable can be tricky. That's where IL comes in! It empowers you to ask critical questions, evaluate sources, and use information effectively, helping you become a self-directed, lifelong learner. Think of it as your information superpower, boosting your ability to learn, make informed decisions, and succeed in all aspects of life (Jeyshankar & Nachiappan, 2021). Therefore, information literacy is viewed as a tool for lifelong learning, spanning across all learning environments and levels of education (Nisha & Varghese, 2021). It enables learners to master content, enhance their research capabilities, become more self-directed, and exercise greater control over their own learning. Information literacy holds significant implications for economic development, educational attainment, and social, cultural, and personal well-being. It underscores the skills, attitudes, and values necessary for efficient exploration, utilization, evaluation, management, synthesis, and application of information.

The "Alexandria Proclamation" underscores that Information Literacy is fundamental to lifelong learning, empowering individuals in all walks of life to seek, evaluate, use, and create information effectively to achieve personal, social, occupational, and educational goals. It is a fundamental human right in the digital era, fostering the social inclusion of all nations. Lifelong learning allows individuals, communities, and nations to capitalize on emerging opportunities in a globalized environment, established for the purpose of collaboration and mutual benefit. It aids them and their organizations in addressing technical, economic, and social challenges, mitigating risks, and advancing overall well-being (Tirado & Muñoz, 2012). In accordance with the Prague Declaration of 2003, "Information Literacy encompasses knowledge of one's information concerns and needs, and the ability to identify, locate, evaluate, organize and effectively create, use and communicate information to address issues or problems at hand; It is a prerequisite for participating effectively in the Information Society, and is part of the basic human right of lifelong learning." Lifelong learning is imperative in an ever-changing world for survival (Planas Vilà, 2012).

2.4 Information Literacy (IL): Theoretical Framework

For well over a century, librarians have served as guides, helping people navigate the vast information landscape within libraries. This tradition, documented by researchers like (Tuckett & Stoffle, 1984), stretches back to the 1800s. Early efforts focused on basic library orientation, teaching users how to find books and other resources. Over time, instruction evolved to include skills like bibliography, research methods, and broader user education. A key turning point came in 1974 with the introduction of "information literacy" (Zurkowski, 1974). This concept, championed by information professionals and educators like (Bruce, 2000), recognized the importance of equipping individuals with the skills needed to critically analyze, evaluate, and effectively use information in all its forms. This shift in focus has had a global impact, empowering users to navigate the ever-growing information age with confidence.

Three theoretical perspectives are presented that represent different understandings of information literacy: This study analyzes how information literacy is understood through three distinct lenses: 1) Phenomenography: This approach explores individuals' lived experiences of information use. Instead of viewing information literacy as a fixed set of skills, it highlights the diverse ways people encounter and engage with information; 2) Sociocultural Perspective: This lens emphasizes the social context and tools that shape information practices. It argues that how we use information is inseparable from the technologies and social interactions involved; and 3) Foucauldian Discourse Analysis: This perspective takes a broader historical and sociological approach. It examines how larger narratives and power structures influence our understandings of information, literacy, and knowledge. These three perspectives differ from the dominant cognitive approach, which focuses on individual mental processes for information-seeking. They share a common ground: viewing information literacy not as a separate discipline, but as an area where understanding information, learning, and knowledge is crucial. Here, Library and Information Science plays a role by studying information and practices, and the critical link between information use and learning (Limberg et al., 2012).

2.5 Information Literacy Model

According to Tirado & Muñoz, (2012) an information literacy model serves as a framework, aiming to delineate the level of competence individuals must attain before becoming information literate. To achieve the goals of information literacy, various information scientists, scholars, theorists, organizations, associations, individual or group researchers, and academicians have endeavored to formulate diverse models at different points in time. These models provide structured guidance for learners, information users, students, librarians, and teachers, enabling them to navigate their educational journey (Ranaweera, 2008).

Drawing from various learning theories, a multitude of Information Literacy teaching and learning modules have been developed and are utilized by educators and Information practitioners worldwide. Some noteworthy models include the following, as highlighted by (Gutiérrez, 2014): (i) The thoughtful learning cycle developed by Stripling and Pitts in (1988), (ii) Big6 information skills, developed by Eisenberg and Berkowitz (1990), (iii) Attributes of an

information literacy person developed by Doyle in (1992), (iv) Information search Process (ISP) model developed by Kuhlthau (1993), (v) Pathway to knowledge developed by Pappas and Tepe in (1997), (vi) Research cycle raceway developed by J. McKenzie in (1995), (vii) Seven Faces of Information Literacy developed by Bruce in (1999), (viii) The New South Wales (NSW) (Australian) Information Process model (2004). (ix) The SCOUL the Seven Pillars of Information Literacy: Core Model Moira Bent & Ruth Stubbings in (2011), and (iix) The Information Literacy Competency Standards for Higher Education (ILCHE), adopted by the Association of College and Research Libraries (ACRL) in (Chicago 2000) have become an essential document related to the emergence of information literacy as a recognized learning outcome at many institutions of higher education. Since March 2013, a new task force has been working on the framework of the document (Beilin, 2015).

3. Research Design

This study utilized both primary and secondary sources of data. In Ethiopia, there are eight public research universities. Among them, academic staff from four selected universities and information literacy staff were the primary sources of data, accounting for 45% of the total (Addis Ababa, Gonder, Haromaya, Hawasa) considered for the research. The total academic staff in these universities is 8024, excluding supportive academic staff. The sample size was determined using (Yamane, 1973), with a proportionate method used due to the varying population sizes of the selected universities. Interviews and focus group discussions (FGDs) were conducted with randomly selected academics from the sampled higher education institutions.

Data collected was analyzed using descriptive and inferential statistics, including mean, standard deviation, and one-way ANOVA. The main instrument for data collection was a questionnaire developed by the researchers, used to gather information from both the academic staff and information literacy staff. Data collected and analyzed using the Statistical Package for Social Science (SPSS), which was employed to analyze quantitative data (Wagner, 2019). To assess the information literacy practices of academic staff in Ethiopian research universities, descriptive statistics such as percentage, median, mean score, and other tools were utilized.

The multistage sampling method was employed to define the samples at different stages. Responses gathered through questions from academic staff were organized using SPSS 24 for both descriptive and inferential analysis. Qualitative data collected via open-ended questionnaires will be categorized thematically and narrated. Descriptive statistical tools, such as frequency, mode, median, and mean score, were used for data interpretation. Inferential statistics were applied to examine variations based on gender, academic rank, age, and experience.

4. Discussion of Results

4.1 Response Rate

A total of 367 questionnaires were distributed to the four universities in Ethiopia. From 367 questionnaires a total 290 (79%) were returned and valid for analysis, while the remaining (21%) were not returned at or question the questionnaires were not included due to incompleteness.

4.2 Demographic Characteristics

Participants of the study are 290 out of whom 217 (74.8%) of them are male and the rest 73 (25%) are females. The study subjects are four places namely Gonder, Hawassa, Addis Ababa, and Haremaya. Accordingly 33% of them are from Haremaya, 23% of them are from Gondor, 31% are from Hawassa, and 12% are from Addis Ababa. The subjects' academic rank of the study ranges from full professor to assistant lecture. The majority of them 38% of them are lecturers and 33% of them are assistant professors. The least are 3% who are neither academics nor professionals. At faculty level, the natural science faculty is 61% where as 39% are from natural science faculty.

4.4 Descriptive Analysis

The descriptive analysis is based on the data collected from both qualitative and quantitative data. The quantitative data attempted to calculate the mean of the research sites. Following the mean result, ANOVA is calculated to see the similarities between the three researches cites. Based on the ANOVA result of the P value significance level is used for analysis.

4.4.1 The concept and importance of information literacy

Information literacy is a set of abilities requiring individuals to “recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information. The four universities have unanimously agreed on the importance of information literacy. The mean similarity between the three universities is 0.00 which is strongly significant. All of them said information literacy is one of the courses in the entire curriculum. Below the table shows the mean differences of all universities.

Table 4.1: Importance of information literacy

Variables	Locations	Mean	Within and between group	Sum of Squares	Mean Square	F	Sig.
there is IL course in the curriculum	Addis Ababa	2.1714	Between Groups	18.150	6.050	11.961	.000**
	Hawasa	1.8932	Within Groups	144.663	.506		
	Haremaya	1.5158	Total	162.814			
	Gonder	1.4561					

The arrival of information age and its rapid growth has created challenges throughout the world. It has brought an enormous increase in the quantity of information available to the public (includes students) and multiplied the media of knowledge transfer such as internet, CDs and electronic databases. Students can easily acquire large amount of information but they do not know how authentic, valid and reliable the information is. This poses special challenges for students in evaluating, understanding and using information in ethical and legal manner. Information literacy as core competency helps students to locate needed information and

evaluate it critically in order to face the new challenges of the information age. Three of the professors said the following.

Higher education institutions are important in society as they provide higher education to the workforce. They must meet society's requirements by producing highly skilled people. They act as a leader for societal change and set an example for society to follow. The educated graduate of the 21st century should be one, who must empowered with various skills and abilities such as lifelong learning skills, enquiry and research skills to carryout systematic investigation for finding solutions to complex problems, employability and career development skills to succeed in the rapidly changing working place, capacity survive in the present globalized society, and many more. Thus information communication literacy is vital for all aspect of the society (R3).

I think I understand from your discussion it is important but this time most of the staff not going to the library physically that is why we don't have an attachment and don't know about Information literacy we are searching information by ourselves or sometimes we work with our colleagues (R1).

I am delivering a course for Graduate students and my focus is on their research work some students do have research skill and some aren't have that depends on the students competency I have no idea who should give this IL skill (R2).

4.4.2 Information literacy and the pedagogy

Teaching faculty have a greater responsibility in designing curricula and assignments that foster enhanced engagement with the core ideas about information and scholarship within their disciplines. Librarians have a greater responsibility in identifying core ideas within their own knowledge domain that can extend learning for students, in creating a new cohesive curriculum for information literacy, and in collaborating more extensively with faculty. It is important for librarians and teaching faculty to understand that the framework is not designed to be implemented in a single information literacy session in a student's academic career; it is intended to be developmentally and systematically integrated into the student's academic program at a variety of levels. This may take considerable time to implement fully in many institutions.

Table 4.2: Information literacy and the pedagogy

Variables	Locations	Mean	Within and between group	Sum of Squares	Mean Square	F	Sig.
information knowledge and skill needed	Addis Ababa	2.8286	Between Groups	129.304	43.101	15.599	.000***
	Hawasa	3.0388	Within Groups	790.227	2.763		
	Haramaya	4.2000	Total	919.531			
	Gonder	4.4737					

The table shows all the universities unanimously agree on the importance of IL skills and knowledge. Information competencies are a key factor in lifelong learning. They are the first step

in achieving educational goals. The development of such competencies should take place throughout citizens' lives, especially during their educational years, where librarians, as a part of the learning community and, as experts in information management, have or should assume the key role of facilitating information literacy. Through the creation, with faculty, of curriculum-integrated programs, librarians should actively contribute to the students' learning processes in their search to enhance or develop the skills, knowledge and values needed to become lifelong learners. These guidelines are a conceptual template to guide the creation of information literacy (IL) programs in academic and school libraries, although most of the principles can also be applied to public libraries. The document provides information to frame the IL efforts of educators, librarians and information facilitators at the international level, particularly in nations where IL is in the early stages of development. It is also of value to anyone who may need to start an IL program and would like a general conceptual framework, regardless of their geographical location.

The continuing growth of electronic information has made librarians more aware of the need for assistance and instruction to all types of information seekers. Librarians are becoming more concerned that library users will need more training and skills development in using the World Wide Web, so they can become more critical, evaluative and responsible information consumers. As a result, librarians are increasingly placing information-skills instruction modules on the World Wide Web to address instructional needs of remote users and to build virtual libraries. Hence it is this group of professionals who offer the teaching of information literacy. The table below shows the university professors agree on the fact that information literacy as a course must be taught by the information literate professionals.

Table 4.3: Importance of IL skills and knowledge

Variables	Locations	Mean	Within and between group	Sum of Squares	Mean Square	F	Sig.
IL course equip students with the skills for course they take	Addis Ababa	1.5429	Between Groups	5.355	1.785	3.813	.011** *
	Hawasa	1.4951	Within Groups	133.900	.468		
	Haramaya	1.2316	Total	139.255			
	Gonder	1.2456					

Table 4.3 shows all the universities unanimously agree on the importance of IL skills and knowledge for the course they take. Information competencies are a key factor in lifelong learning. They are the first step in achieving educational goals. The development of such competencies should take place throughout citizens' lives, especially during their educational years, where librarians, as a part of the learning community and, as experts in information management, have or should assume the key role of facilitating information literacy. Through the

creation, with faculty, of curriculum-integrated programs, librarians should actively contribute to the students' learning processes in their search to enhance or develop the skills, knowledge and values needed to become lifelong learners. These guidelines are a conceptual template to guide the creation of information literacy (IL) programs in academic and school libraries, although most of the principles can also be applied to public libraries. The document provides information to frame the IL efforts of educators, librarians and information facilitators at the international level, particularly in nations where IL is in the early stages of development. It is also of value to anyone who may need to start an IL program and would like a general conceptual framework, regardless of their geographical location.

Table 4.4: Library's Provision of basic information literacy skills

Variables	Locations	Mean	Within and between group	Sum of Squares	Mean Square	F	Sig.
your university offers training on the use of library resources for the staff	Addis Ababa	3.0388	Between Groups	32.456	10.819	29.193	.000** *
	Hawasa	4.2000	Within Groups	105.989	.371		
	Haramaya		Total	138.445			
	Gonder	4.4737					
it is very important to acknowledge others work	Addis Ababa	4.3429	Between Groups	124.848	41.616	20.179	.000** *
	Hawasa	3.6602	Within Groups	589.828	2.062		
	Haramaya	2.6000	Total	714.676			
	Gonder	2.5614					
it is important to follow copyright regulation	Addis Ababa	2.0000	Between Groups	32.131	10.710	4.853	.003** *
	Hawasa	2.1456	Within Groups	631.124	2.207		
	Haramaya	2.6105	Total	663.255			
	Gonder	2.9298					

Table 4.4 shows that all the universities staff agreed that the library offers basic information literacy skills for the students. Information has become a vital source for world economies and is certainly the basic component of education. Information is a vital element to technological and scientific change. It poses several challenges to individuals of all walks of life: students, workers, and citizens of all types. The current information overload requires people to validate and assess information to verify its reliability. In summary, information literacy is assumed to be the knowledge and skills necessary to correctly identify information needed to perform a specific task or solve a problem, cost-efficiently search for information, organize or reorganize it, interpret and analyze it once it is found and retrieved (e.g. downloaded), evaluate the accuracy and reliability of the information, including ethically acknowledging the sources from whence it

was obtained, communicate and present the results of analyzing and interpreting it to others if necessary, and then utilize it for achieving actions and results.

4.5 uses of computerized databases to access information

Variables	Locations	Mean	Within and between group	Sum of Squares	Mean Square	F	Sig.
who offers IL course	Addis Ababa	2.4000	Between Groups	15.754	5.251	3.970	.009** *
	Hawasa	2.5340	Within Groups	378.277	1.323		
	Haramaya	2.0526	Total	394.031			

All the universities are witnessing a rapid growth in computer networking and the use of computerized databases to access information in their libraries. In fact, most academic libraries today are “hybrid libraries”, adding the new e-library features to their traditional library services.

Table 4.6 Changes to and new characteristics of library services

Variables	Locations	Mean	Within and between group	Sum of Squares	Mean Square	F	Sig.
IL staff can perform better than other dep. staff	Addis Ababa	1.2857	Between Groups	.311	.104	.325	.808
	Hwasa	1.2718	Within Groups	91.293	.319		
	Haremaya	1.2737	Total	91.603			
	Gonder	1.1930					

However, the university staffs do not agree on the notion that the information literacy staff can perform the teaching better. There is still an assumption other professional are to do the teaching of information literacy.

Table 4.7 Collaboration between the department responsible

Variables	Locations	Mean	Within and between group	Sum of Squares	Mean Square	F	Sig.
is there collaboration between the department responsible	Addis Ababa	2.2571	Between Groups	46.449	15.483	34.777	.000** *
	Hawasa	1.9612	Within Groups	127.330	.445		
	Haremaya	1.2842	Total	173.779			
	Gonder	1.2105					

However, the university staffs do not agree on the notion that the information literacy staff can perform the teaching better. There is still an assumption other professional are to do the teaching of information literacy.

Table 4.8 collaboration between the departments responsible

Variables	Locations	Mean	Within and between group	Sum of Squares	Mean Square	F	Sig.
Is there collaboration between the department responsible	Addis Ababa	2.2571	Between Groups	46.449	15.483	34.777	.000** *
	Hawasa	1.9612	Within Groups	127.330	.445		
	Haremaya	1.2842	Total	173.779			
	Gonder	1.2105					

What the staff in all universities agrees most significantly is that information literacy is offered with the collaboration between the departments responsible.

Information literacy is therefore essential for university students and faculties to cope with new online services in and provide a competitive advantage to themselves and the wider society. Without the training it is unlikely that electronic information sources will be used effectively. The users of the library or the students of higher education lack the sophisticated skills that are needed to exploit the libraries research potential. It is necessary for users to have the requisite skills to obtain relevant information quickly and effectively from electronic sources and become what is often referred to as 'Information literate' When all aspects of library services enter cyberspace, it becomes inevitable for information literacy instruction to go online.

Table4.9 perceived level of information literacy

Variables	Locations	Mean	Within and between group	Sum of Squares	Mean Square	F	Sig.
How do you rate yourself in being information literate	Addis Ababa	1.5614	Between Groups	20.026	6.675	8.80	.000** *
	Hawasa	1.4517	Within Groups	216.805	.758		
	Haramaya	2.8286	Total	236.831			
	Gonder						

The respondents were asked how they rate their information skills. The concept of information literacy has gained considerable attention in the higher education communities. There is a common belief that higher education institutions should include the teaching of lifelong learning skills in their missions.

Universities have the responsibility of empowering their members with necessary skills, so that they can contend with the world of information independently. Since the 1990s, higher education communities throughout the world have stressed the importance of information literacy.

Table 4.10 Information Literacy teaching methods

Variables	Locations	Mean	Within and between group	Sum of Squares	Mean Square	F	Sig.
IL teaching methods	Addis Ababa	2.0571	Between Groups	51.634	17.211	10.023	.000***
	Hawasa	2.2233	Within Groups	491.111	1.717		
	Haremaya	2.9263	Total	542.745			
	Gonder	3.1404					

Information literacy is a “set of skills” that can be learned. That set of skills includes a certain attitude toward learning itself, the use of tools, such as online tutorials, the use of techniques, such as working with groups, and the use of methods, such as a reliance on mentors, coaches and ombudspersons. In contrast, lifelong learning is a good habit that must be acquired and accompanied by the adoption of a positive frame of mind. The willingness to change and a curiosity or thirst for knowledge is very helpful pre-conditions to lifelong learning.

The participation of library professionals in information literacy takes many different forms. The ideal one is to have a program that is part of the curricula because information literacy requires sustained development throughout all formal educational levels, primary, secondary, and tertiary. Achieving information literacy requires students to have had a cumulative experience in most, if not all, subjects in addition to learning experiences. Information literacy should be woven into the content, structure and sequence of the curricula. Information literacy cannot be the product of a single course (Bundy, 2004). Therefore institutional collaboration among all learning stakeholders is crucial. Information professionals should consider participating in a teaching course or recognized qualification to be part of the institutional information literacy endeavor.

Table 4.11 Information literacy commitments of institutions

Variables	Locations	Mean	Within and between group	Sum of Squares	Mean Square	F	Sig.
not enough time in the course	Addis Ababa	.4000	Between Groups	2.067	.689	2.887	.036
	Hawasa	.5534	Within Groups	68.277	.239		
	Haramaya	.6316	Total	70.345			
	Gonder	.6842					

The complete success of an information literacy program depends on the commitment at the institutional level. However, a commitment is not always present or clear at top management levels. Therefore, information professionals must devote time to create the relevant strategies to convince and sell the benefits of information literacy to institutional leaders to get their support.

All the universities agreed that the teaching of information literacy does not have management support.

Table 4.12 Institutional management support

Variables	Locations	Mean	Within and between group	Sum of Squares	Mean Square	F	Sig.
lack of management support	Addis Ababa	.4571	Between Groups	7.657	2.552	12.406	.000***
	Hawasa	.5631	Within Groups	58.840	.206		
	Haremaya	.8526	Total	66.497			
	Gonder	.8596					

Change strategies. Resistance to change is basic to human nature; information professionals should understand the obstacles so that they can overcome them. According to Walton (personal communication, November, 2004), the major problem faced as information professionals is that we are all too often resource-based rather than curriculum-based with a strong emphasis on student-centered learning. In addition, as information professionals we need to sufficiently understand what information literacy- (not necessarily called that by students or tutors) related activities are already taking place between tutors and students.

The table shows there is a similarity between all the universities on the fact that there is no management support in their learning situations.

Table 4.13 Institutional support for training on IL

Variables	Locations	Mean	Within and between group	Sum of Squares	Mean Square	F	Sig.
your university does not offer training on the use of library resources for the staff	Addis Ababa	3.0388	Between Groups	32.456	10.819	29.193	.000***
	Hawasa	4.2000	Within Groups	105.989	.371		
	Haremaya		Total	138.445			
	Gonder	4.4737					

There is the overall institutional (college or university) strategy. It certainly is helpful if the institution acknowledges information literacy by stating that it is an attribute of graduating students, or adopts it as a skill which has to be progressed through every course of study. The role of academic and special libraries is significant in offering training on IL. “Academic staffs are responsible for ensuring that information literacy skills have been embedded in the curricula, teaching, learning and assessment processes. Academic staffs, librarians and learning support providers are partners in providing opportunities for students to achieve the ANZIIL standards in the context of their disciplines.” (University of Auckland, 2006) The table shows there is similarities between all the universities on the fact that there is no training offered to the staff concerning information literacy.

4.2 Discussion

Ethiopia has named eight universities Center of Excellences in research. Addis Ababa, Gondar, Bahir Dar, Mekele, Jimma, Hawassa, Arba Minch and Haromaya Universities, and recently Ethiopian Civil service University have been named center of Excellences by Ministry of Science and Higher Education. The research selected the first four universities four universities are believed to have better infrastructure, resource and human capacity as they are the first in terms of foundation.

The study subjects are four places namely Gonder, Hawassa, Addis Ababa, and Haremaya Universities. These section summaries the research findings based on the three as outlined below:

- Information literacy practices of the research universities in providing services to the academic staff

Academic staff (Teaching faculty) have a greater responsibility in designing curricula and assignments that foster enhanced engagement with the core ideas about information and scholarship within their disciplines. Librarians have a greater responsibility in identifying core ideas within their own knowledge domain that can extend learning for students, in creating a new cohesive curriculum for information literacy, and in collaborating more extensively with faculty. It is important for librarians and teaching faculty to understand that the Framework is not designed to be implemented in a single information literacy session in a student's academic career; it is intended to be developmentally and systematically integrated into the student's academic program at a variety of levels. This may take considerable time to implement fully in many institutions.

- Usability of information literacy services by academic staff of the research universities

All the universities unanimously agree on the importance of IL skills and knowledge. Information competencies are a key factor in lifelong learning. They are the first step in achieving educational goals. The development of such competencies should take place throughout citizens' lives, especially during their educational years, where librarians, as a part of the learning community and, as experts in information management, have or should assume the key role of facilitating information literacy. Through the creation, with faculty, of curriculum-integrated programs, librarians should actively contribute to the students' learning processes in their search to enhance or develop the skills, knowledge and values needed to become lifelong learners.

- Major challenges of the academic staff in the usability of information literacy services provided by the research universities

The respondents were asked how they rate their information skills. The concept of information literacy has gained considerable attention in the higher education communities. There is a common belief that higher education institutions should include the teaching of lifelong learning

skills in their missions. Universities have the responsibility of empowering their members with necessary skills, so that they can contend with the world of information independently.

“Academic staffs are responsible for ensuring that information literacy skills have been embedded in the curricula, teaching, learning and assessment processes. Academic staffs, librarians and learning support providers are partners in providing opportunities for students to achieve the ANZIIL standards in the context of their disciplines (Moselen & Wang, 2014).”

The complete success of an information literacy program depends on the commitment at the institutional level. However, a commitment is not always present or clear at top management levels. Therefore, information professionals must devote time to create the relevant strategies to convince and sell the benefits of information literacy to institutional leaders to get their support. All the universities agreed that the teaching of information literacy does not have management support.

5. Conclusion

The study determined that certain topics covered in the information literacy module, such as information sources, search and retrieval tools, information evaluation and manipulation, referencing and citing, copyright considerations, communication of information, utilization of Internet resources, including databases, and organization of library resources, closely mirrored those taught in the library orientation program. The primary modes of instruction encompassed lectures, group discussions, and practical exercises conducted in computer laboratories, with a combination of theoretical and practical approaches within the library setting.

The research revealed that, across the University of Addis Ababa, Gonder, Hawasa, and Haromaya, formal collaboration between academic and library staff in the teaching of information literacy or library orientation programs was found to be lacking. Moreover, the majority of respondents, regardless of whether they had received formal information literacy training or not, demonstrated proficiency in identifying, locating, retrieving, and utilizing predominantly newspapers and books. Regarding the incorporation of citations and references in academic work, it was observed that all respondents who had received formal information literacy training utilized citations and references in their academic endeavors. Conversely, a significant proportion of respondents without formal training in information literacy did not employ citations and references in their academic work.

Several challenges in the teaching and learning of information literacy were identified, including constraints on available time, insufficient computer skills, inadequate facilities and equipment for teaching, practical constraints for students, insufficient cooperation, class overcrowding, and irregular network connectivity disruptions due to power outages. Furthermore, the study suggested that the most effective method for teaching information literacy was in a computer laboratory setting, where access to computers is readily available.

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