

**MANAGEMENT OF INFORMATION LITERACY PROGRAMMES IN  
SELECTED TECHNICAL TRAINING INSTITUTION LIBRARIES  
IN NAIROBI COUNTY, KENYA**

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## **DECLARATION**

I certify that I am the sole author of the research project and that it has not been submitted to another institution or university for certification. The project has been supplemented by sources that have been cited and properly acknowledged. Where text, data (including spoken words), pictures, and tables have been taken from other sources, including the internet, they are properly acknowledged, references are mentioned according to the current APA style, and plagiarism laws are followed.

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This research project has been submitted for examination with my approval as the university supervisor.

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## **DEDICATION**

I dedicate this research to my beloved husband James, my daughter Jewel and son Jeuvan, and to my parents Jane Gesare and Stephen Mogere.

## **ACKNOWLEDGEMENT**

I am deeply grateful to the Almighty God for guiding me thus far, providing me with a vision, and granting me the capacity to conduct this research. I am also thankful for His protection, grace, and love.

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## **ABBREVIATIONS AND ACRONYMS**

ACRL	Association of College and Research Libraries
ICT	Information and Communications Technology
IL	Information Literacy
ILP	Information Literacy Programme
IR	Information Retrieval
ISP	Information Search Process
KNLS	Kenya National Library Services
KTTC	Kenya Technical Trainers College
KTTID	Karen Technical Training Institute for the Deaf
KTVC	Kasarani Technical and Vocational College
NACOSTI	National Commission for Science, Technology & Innovation
NTI	Nakuru Training Institute
NTTI	Nairobi Technical Training Institute
SPSS	Statistical Package for the Social Sciences
TTI	Technical Training Institutions
UNESCO	United Nations Educational, Scientific and Cultural Organization

## ABSTRACT

Information literacy (IL) skills are crucial for navigating the ever-changing social and economic phenomena of the world. These skills give information users the ability to critically deliberate and make informed decisions concerning the information they find and utilize. At the moment, information literacy is among the most valuable and relevant services within learning institutions, the job market, and the world. This calls for an increased demand for information literacy programmes. Yet, technical institutions are facing various setbacks in managing these programmes to ensure they are effective and efficient in their roles. This study, therefore, sought to determine the management of information literacy programmes in selected technical institution libraries in Nairobi County. The aim of the study was to establish the implementation strategies for information literacy programmes, and the frequency at which they were reviewed, to determine the users' perceptions of the implemented information literacy programmes, and to identify the major setbacks to the implementation of information literacy programmes in selected technical training institution libraries in Nairobi County. The Information Search Process (ISP) paradigm served as the study's direction. This research study adopted a descriptive statistical method. Krejcie and Morgan sampling method was applied in coming up with the total sample size. A total of 500 respondents, comprising 5 head librarians, 278 teaching staff, and 217 students from five of the selected technical training institutions, constituted the subjects for this study. Questionnaires and the interview schedule were used for data collection from the respondents. The Statistical Package for the Social Sciences (SPSS) version 23 was used to descriptively examine the data from the questionnaires that constituted statements written on the basis of a 1-5 Likert scale to measure different aspects of information literacy programmes (ILPs). The thematic analysis assessed qualitative data, which was then presented through written narratives. Quantitative data was represented in figures and tables. The reliability and validity of the instruments were tested through a pilot study that was conducted at Nakuru Training Institute (NTI) and the university supervisor assisted in properly framing questions and realigning them according to the objectives of the study and refinement of the instruments to eliminate ambiguities. A sample size of 50 respondents was used in the pilot study. The study established that technical institutional libraries were implementing various forms of strategies for IL; the IL programmes were reviewed after every orientation process; important skills were acquired by library patrons during IL training; and the library was facing a number of challenges as it implemented ILPs. The study concluded that technical institution libraries have instituted several programs that are currently running; the ILPs are reviewed after every orientation process using a feedback form; and information literacy is a good way of creating awareness of the library resources and services. The study recommended that the libraries need to identify various information literacy programmes that can work for them and customize them according to their environment; the ILPs needed to change with the changing times and needs of users; the libraries needed to focus more on the users than on the service when implementing ILPs; and that stakeholders' collaboration is required if the ILPs are to be effectively implemented.

# CHAPTER ONE

## INTRODUCTION AND BACKGROUND OF THE STUDY

### 1.1 Introduction

The chapter discusses the study's background information, the problem statement, the study's general objective, its objectives, its research questions, its significance, its limitations and delimitation, its assumptions, its theoretical and conceptual framework, and its operational definition of terms.

### 1.2 Background to the Study

Information literacy (IL) skills are important in problem-solving in the ever-changing social and economic phenomena. Yet ignorance, poverty, and unemployment are on the rise, as presented by a number of scholars who have highlighted the role, need, and challenges faced by Information Literacy programmes in promoting literacy skills (Ahonem & Kinnunen, 2015; Kuhlthau (2017). The concept of information literacy has been redesigned and strengthened across Europe, America, and Asia to be recognized as essential literacy for the twenty-first century (Hepworth, 2017).

Information literacy is the ability to critically consider and make an informed decision regarding what one finds and utilizes, according to the Chartered Institute of Library and Information Professionals (CILIP) (2018). It includes abilities and skill sets that a person needs to tackle tasks that are associated with information. It includes identification, accessibility, understanding, assessment creation, management, dissemination, sharing, and storage. According to Wolff, Rod and Schonfeld (2016), at the moment, information literacy is among the most valuable and relevant services within libraries in technical institutes. This

has been brought about by the increasing demand for information literacy programmes. Information is currently expanding rapidly, especially in this information age. Therefore, this creates challenges in identifying, accessing, and using information.

Information literacy is critical for today's learners because it promotes problem-solving approaches and thinking skills - asking questions and seeking answers, finding information, forming opinions, evaluating sources, and making decisions - which fosters successful learners, effective contributors, confident individuals, and responsible citizens (Schulz-Jones, 2016). However, in order to achieved an effective information literacy programme that will satisfy users' needs in academic setting. Therefore, there is need to implement information literacy program strategies

Creating effective information literacy program techniques is critical to ensuring that participants learn how to discover, assess, and use information efficiently. To increase satisfaction, these tactics should be adapted to the specific needs and aims of the program's target audience (America Library Association, 2019). Strategy such as needs assessment is a very important first step in planning and modifying information literacy programs to the specific needs of participants (Smith, 2017).

Educators can determine their audience's individual information literacy needs, prior knowledge, and learning preferences by carefully gathering data through surveys, interviews, and observations (Johnson & Brown, 2019). This data-driven strategy ensures that the program's content and delivery techniques meet the needs of the participants (Anderson, 2020). The ultimate goal is to develop a program that not only addresses information literacy

skills shortages but also encourages participants to flourish in academic, professional, and personal situations (Clark et al., 2018).

The planning and implementation of an effective information literacy program requires clear program objectives (Jacobson & Mackey, 2017). These objectives should express the program's goals, such as improving students' research skills, critical thinking, and digital literacy. Having precise objectives helps to focus the program's content, assessment techniques, and instructional tactics, ensuring that the program matches with broader educational aims while also meeting the specific needs of the target audience.

Curriculum development is another method in information literacy programs, since it aids in the organization and delivery of content. As the authors of Breivik and Gee (2006) put it, "Curriculum development involves designing, planning, and organizing educational content, activities, and assessments to facilitate the development of information literacy skills among participants." This technique ensures that participants receive a planned and thorough information literacy education that covers a wide range of abilities, from information seeking to critical evaluation.

Strategy such as training improved information literacy skills of both students and faculty members. Effective training programs, as illustrated by Kuhlthau (2004), provide individuals with the knowledge and competencies required to navigate the ever-expanding domain of information resources and technology. This type of instruction not only promotes critical thinking but also equips individuals to become skilled information consumers and creators, increasing their academic, professional, and lifelong learning endeavors.

Information literacy programs in universities and other educational institutions often employ a range of strategies to help students develop the essential skills needed to find, evaluate, and use information effectively (Harrison,2021). Strategies such as Workshops and Training Sessions are integral components of information literacy in universities, offering students the opportunity to develop essential skills for effective information retrieval and evaluation. These sessions often cover topics like database searching, source evaluation, and citation methods. For instance, a study by Smith and Johnson (2019) found that interactive workshops were particularly effective in enhancing students' information literacy skills, as they foster engagement and hands-on practice.

By participating in these workshops, students can build a strong foundation in information literacy, equipping them with the tools needed to succeed in their academic endeavors and beyond. Furthermore, library orientation programs are also important component of information literacy strategies in universities. These programs serve as a crucial introduction for students to the wide array of resources, services, and facilities that the university library offers (Mudave, 2016).

Students with a comprehensive understanding of the library's capabilities, these orientation programs empower them to navigate the complex world of information effectively (Darling-Hammond, 2020). While the specifics of these programs may vary from one institution to another, their overarching goal is to familiarize students with the tools and expertise available to support their academic journey. As stated by Williams (2017), such programs play an essential role in helping students lay a strong foundation for their information literacy skills, ensuring that they can make the most of the educational resources at their disposal.

A review of information literacy programs in universities reveals their significance in equipping students with critical skills for navigating the vast information landscape. These programs aim to foster students' abilities to locate, evaluate, and use information effectively for academic and lifelong learning. Research by Lloyd and Talja (2019) emphasizes that information literacy programs not only enhance students' research capabilities but also promote their capacity to think critically, solve problems, and make informed decisions. The review further highlights that these programs should be dynamic, adaptable, and integrated into the curriculum to ensure their sustained impact on students' academic success and beyond (Haleem, 2022).

Users' perceptions of information literacy programs are a crucial aspect of their effectiveness. In a study by Johnson and Anderson (2020), it was found that users' perceptions of such programs play a significant role in shaping their engagement and outcomes. Understanding how students, faculty, and other stakeholders perceive information literacy initiatives can help institutions tailor their programs to better meet the needs and expectations of their diverse user groups (Gray, 2022). This perception-based approach allows for program improvements that align with the evolving demands of the digital information landscape and the educational goals of universities.

Information literacy strategies in universities in developed countries is well-established and continues to evolve to meet the changing needs of students and faculty. Several developed countries have made significant strides in integrating information literacy into higher education. For example, in the United States, information literacy programs are widespread and are often integrated into general education curricula (American Library Association, 2016). In Canada, information literacy initiatives are prominent in universities, with a focus

on helping students develop critical thinking and research skills (Harris, 2018). Similarly, the United Kingdom places a strong emphasis on information literacy in higher education, with universities offering various resources and support services to enhance students' information literacy skills (Head, 2013).

In Australia, universities have also recognized the importance of information literacy and have developed comprehensive programs to ensure that students are well-equipped to access, evaluate, and use information effectively (ACRL, 2017). However, limited funding and resources allocated for information literacy initiatives hinder the development and implementation of comprehensive programs (Doiron & Palmer, 2018). Also, ensuring faculty buy-in and collaboration in integrating information literacy into the curriculum is also a challenge, as it requires additional effort and may compete with other instructional priorities (Julien & Barker, 2009).

Information literacy program strategies in African countries varies, with some nations making significant progress, while others face challenges in implementation. Several African countries have been actively working to enhance information literacy programs within their educational institutions. For instance, South Africa has made notable efforts in integrating information literacy into higher education curricula (Bothma, 2018). However, challenges persist in some African countries, where resource constraints, inadequate infrastructure, and limited access to information and technology hinder the development of comprehensive information literacy programs. Ghana, for example, faces resource limitations that impact the implementation of effective information literacy initiatives (Asamoah-Hassan, 2018).

In Nigeria, while there are pockets of progress, achieving widespread information literacy remains a challenge, particularly in remote and underserved regions (Umeh & Amadi, 2016). In Kenya, the government has supported information literacy initiatives to improve education and research (Wanyenda, 2018). However, limited funding and access to up-to-date technology, educational materials, and trained staff can hinder the development and implementation of effective information literacy programs (Ngugi, 2016). Integrating information literacy into the academic curriculum and gaining faculty support and collaboration may pose challenges (Mutula & Ocholla, 2015).

Pembee (2015) found that increased use of library resources by technical institution students in Kenya was dependent on the quality of information systems and user satisfaction all of which were bolstered by quality literacy programs. Sisimwu (2016) pointed out that IL was required in the use of digital resources in libraries in technical institutions in Kenya to make the experience user-friendly, enable easy navigation, and get up-to-date information. Many scholars have painted a grim picture of the management of information literacy programmes in Kenyan libraries. Muhinja (2018) reported low usage of internet resources for academic purposes by library users in Kenyan technical institutional libraries.

Wasike (2017) noted the lack of user skills and computer literacy skills observing that most of the library users were employing trial and error in the use of digital resources in technical institution libraries. According to Amunge (2017), inadequate staff skills hamper the provision of information literacy programmes in technical institution libraries which is compounded by a manifest lack of collaboration between the librarians and the teaching faculty. It is evident that information literacy programmes determine the performance and literacy level among users. The increased enrollment of youth in technical institutions

therefore calls for research on the management of ILPs in selected technical training institution libraries.

### **1.3 Statement of the Problem**

Information literacy strategies are systematic approaches and techniques employed to develop individuals' information literacy skills and competencies. Information literacy encompasses the ability to access, evaluate, use, and communicate information effectively, regardless of the format or source. Information literacy strategies encompass a variety of activities, methods, and tools designed to help individuals, whether students, professionals, or the general public, navigate the complex information landscape. These strategies often include instruction on how to critically assess the credibility and reliability of sources, search for information efficiently, understand and apply ethical considerations in information use, and synthesize information to solve problems or make informed decisions. Information literacy strategies are typically integrated into educational curricula and lifelong learning initiatives to empower individuals with the skills necessary to thrive in a knowledge-based society.

Preliminary investigation by the researcher shows that despite the importance attached to the information literacy programme in technical institutions in Kenya. The implementation of the strategies that will enhance its effectiveness faces a range of significant challenges. Limited resources and funding in the education sector constrain the development and deployment of comprehensive information literacy programs. Integration of information literacy into the curriculum and gaining faculty support can be challenging. This often results

in information literacy being perceived as an additional, rather than an integral, part of the educational process.

Many institutions including technical training institutions in Nairobi County struggle to provide up-to-date technology, educational materials, and adequately trained personnel necessary for these initiatives to be effective. Based on this, the research investigate the management of information literacy programmes in the selected technical training institution libraries in Nairobi County, Kenya.

### **1.3.1 General Objective of the Study**

The main objective of the study was to establish the management of information literacy programmes in the selected technical training institution libraries in Nairobi County, Kenya.

### **1.3.2 Objectives of the Study**

- i. To establish various strategies of information literacy programmes in the selected technical training institution libraries.
- ii. To establish how frequently information literacy programmes are reviewed in the selected technical training institution libraries.
- iii. To determine the users' perceptions towards information literacy programmes in the selected technical training institution libraries.
- iv. To identify challenges associated with information literacy programmes in the selected technical training institution libraries.

### **1.3.3 Research Questions**

- i. Which strategies have been adopted in the implementation of the information literacy programmes in the selected technical training institution libraries in Nairobi County?
- ii. How frequently are the information literacy programmes reviewed in the selected technical training institution libraries in Nairobi County?
- iii. What are the users' perceptions of the implemented information literacy programmes in the selected technical training institution libraries in Nairobi County?
- iv. What are the major challenges that affect the implementation of information literacy programmes in the selected technical training institution libraries in Nairobi County?

### **1.4 Significance of the Research**

For the government and policymakers, IL is essential for engaging citizens for new knowledge development, social participation, and lifelong learning; hence, this research is a crucial benchmark as a needed assessment tool for curriculum and policy reviews for better information uptake and national development.

To the technical institution principals and librarians, the research offers an in-depth comprehension of the manner in which students perceive information literacy and hence determine whether students are receiving the proper instructions. This will help technical

institutions efficiently and effectively tackle challenges and issues that affect ILPs in the technical training institution libraries.

The research will also help students and the teaching staff in technical institutions to acquire current IL skills that adhere to IL standards and hence equip them with skills necessary within the current surroundings of dynamic changes in technology, a proliferation of information resources, and a competitive world of careers, innovation, research, and employment. Finally, this study becomes a reference point for future researchers, including academicians, to carry out relevant studies and contribute to professional knowledge.

### **1.5 Limitations and Delimitation of the Study**

Based on the available financial resources, time, and the need to have sufficient data to answer all the objectives of the study by the researcher, this research focused on five (5) selected technical institutional libraries based on their population sizes, period of existence, IL programmes, offered and the resource allocation to the institutions by the Ministry of Education.

The technical institutions that have existed for a long time and have a large number of students attract large amounts of government funding, including Kenya Technical Trainers College (KTTC), Karen Technical Training Institute for the Deaf (KTTID), Kasarani Technical and Vocational College (KTVC), Nairobi Technical Training Institute (NTTI), and PC Kinyanjui Technical Training Institute.

## **1.6 Assumptions of the Study**

The research was based on the assumption that the selected technical libraries have implemented some form of Information Literacy Programmes that has some comparable features and that the participants offer prerequisite and needed information to strengthen the evaluation and suggestions in the study findings.

## **1.7 Theoretical and Conceptual Framework**

### **1.7.1 Theoretical Framework**

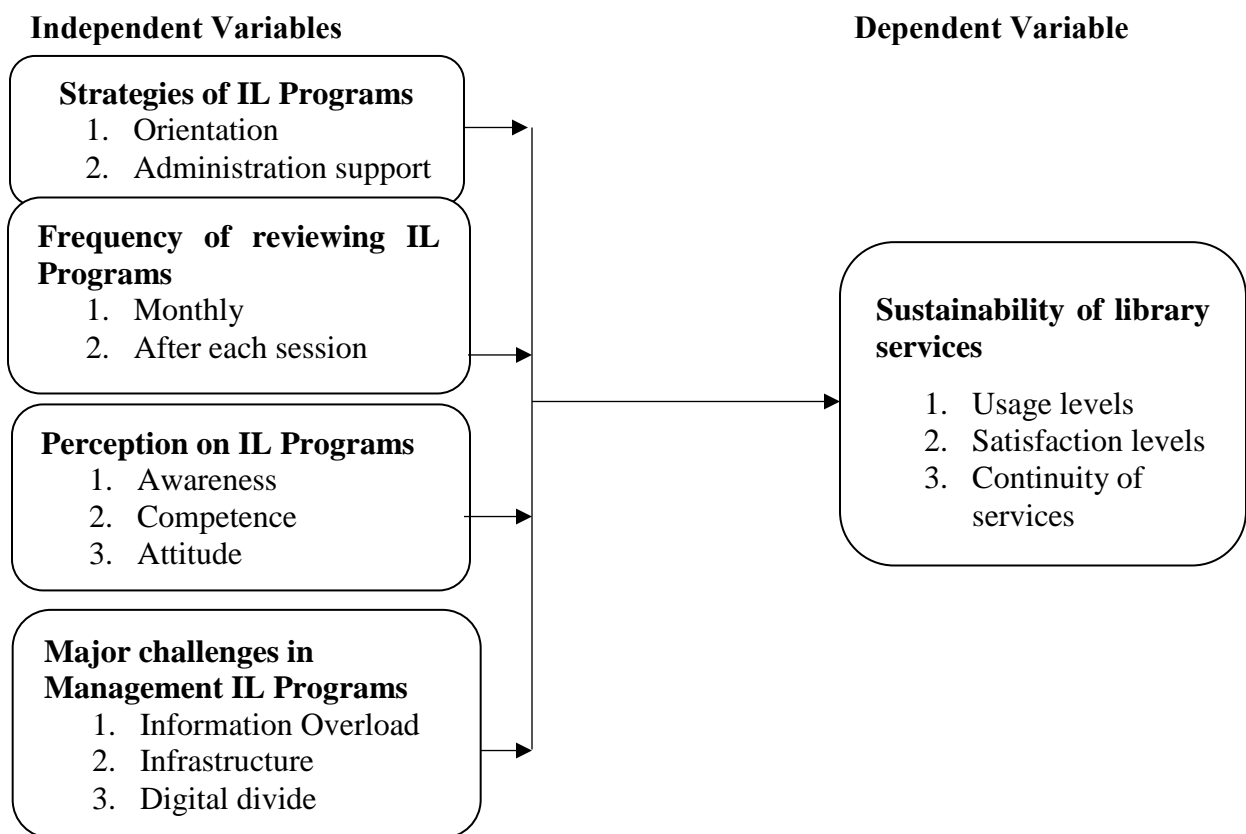
This part introduced the theoretical framework, which served as the foundation for this study. The Information Search Process (ISP) model developed by (Kuhlthau, 2017) served as the study's main framework. This information search model describes information behavior in activities that call for knowledge production. According to Kuhlthau et al. (2017), the definition of information searching is that of a patron's behavior of purposefully finding suitable information as they engage with systems of retrieving information. The ISP model was used to illustrate the implementation of ILPs in terms of perceptions, frequency of review, implementation strategies, and the major challenges to information service providers in implementing the information search process based on the ILPs adopted by selected technical institutional libraries.

This model was used to describe the independent variables by exploring the effects of external factors on ILPs to enhance the ISP. The users' attitude, competence, and awareness determined the perceptions of ILPs; basic literacy, specific career needs, and service delivery determined the review of IL programs; and orientation, policy, and administration support determined the implementation strategies of ILPs. Due to challenges of information

overload, available infrastructure, and the digital divide, the ISP model presents learning institutions with a dilemma, whereby several elements impacting their decision of ILP implementation methods were used in the process of searching for information: starting, assembly, choice, development and information outline. The selection, adoption, and use of the different ILPs for technical training institution libraries were the basis for this study.

### 1.7.2 Conceptual Framework

This section provides an analytical tool that summarizes the grounds used to make the conceptual distinctions and organize ideas. The schematic figure 1.1 shows the link among the study constructs replete with indicators of measurement of the variables.



**Figure 1.1: Conceptual Framework**

**Source: Researcher (2021)**

Implementation strategies of ILPs, frequency of reviewing ILPs, perceptions of the implemented ILPs, and the major challenges of implementing IL programmes formed the independent variable while management of IL programmes formed the dependent variable. This is because the literacy skills required by a specific library user were in a way affecting the service delivery and implementation of an ILP. Proper orientation of library users will demonstrate an information-literate society. Administration support through ILP instruction review enhances flexibility in the acceptance levels and implementation levels of IL programmes promoting growth in IL Program implementation. Through the management of IL programmes through different instruction strategies, logical orientation, and management support, there might be an enhanced implementation of IL programs. The management of IL program was also determined by challenges in implementing IL programmes as a result of information overload, infrastructure, and the digital divide among library users. IL programmes need to be constantly updated as technology changes. Institutional management support and government support that restrict and limit the curriculum to some IL programmes might affect the uptake of other core IL programmes if they are not improved on and exploited. Therefore, there is a need to conduct this study.

### **1.8 Operational Definition of Terms**

**Information-** is data that has been processed for utility, use, and storage for later use.

**Information Literacy-** a group of skills required for finding, acquiring, assessing, and utilizing information. Generally, people who are information literate have been trained to be literate. They have learned this skill because of their comprehension of knowledge as being

organized, and therefore they need to find it and learn how to utilize it in a manner that other people may learn from them.

**Information Literacy Programmes-** refer to deliberate initiatives to train people in the techniques and skills of accessing, evaluating, and utilizing information and information tools to mold information problems into solutions (Kuhlthau, 2017).

**Information Use-** is to put into service; employ information for a given purpose.

**Librarian-** is a person who works professionally in a library, and usually holds a graduate degree in librarianship.

**Library Users/Patrons-** these include students, teaching staff, librarians, and other researchers accessing and utilizing technical institutional libraries.

**Service delivery-** refers to the distribution or delivery of needed services.

**Technical Training Institution-** is a school that offers education focused on research and vocational training. Institutions conducting programmes in the field of technical education

## **CHAPTER TWO**

### **REVIEW OF RELATED LITERATURE**

#### **2.1 Introduction**

The chapter contains a review of relevant literature on the studies conducted on Information Literacy Programmes (ILPs) in libraries in Kenya, Africa, and around the world and the Information Search Process (ISP) model. It also covers reviewed literature in line with the study's objectives, including establishing implementation strategies for IL programmes, establishing the frequency of review of ILPs, determining the perceptions of the implemented ILPs, and finally identifying the major challenges faced during the implementation of ILPs in selected Technical Training Institution (TTI) libraries.

#### **2.2 Information Literacy Programmes and Information Search Process**

The Chartered Institute of Library and Information Professionals (CILIP) (2018) defines information literacy as the process of understanding when information is needed, why that information is needed, where it can be found, and how to evaluate, use, and ethically communicate information. Information literacy programs are tools used to produce information-literate people who can retrieve and use information. Additionally, (Badke, 2016; Bowden, 2017) describe information-literate people as people equipped with relevant skills that can be applied during the Information Search Process (ISP) when navigating information resources in their work. This means that information literacy complements the information search process in conceptualizing and using information skills toward problem-solving approaches in learning and the workplace. However, according to Zuworki et al.,

(2018), most university libraries have put in place ILPs to enhance information literacy, yet some learners do not have all the information literacy tools that could be applied as learning techniques and use primary resources to mold information problems into solutions. This study aims to find out whether the same challenge is experienced in TTs.

While studying the behavior of library users in higher learning institutions, Hall (2015) delved into the expected behavior and character of libraries that provide successful ILPs. He pointed out that the user should be proficient in the subject matter, possess research abilities, be self-motivated, and take more responsibility for their own education. However, he did not investigate the implementation of IL programmes used in the institutions. Mugambi (2018) supported the findings, adding that other vital skills that library users should garner from a library information literacy programme include awareness of the available and needed information, potential sources of such information, skills in the retrieval of such information, and knowledge on the eventual use of the information. He did not investigate the situation of ILPs adopted by the libraries.

Botham et al. (2014) evaluated information literacy programmes by university staff and noted the staff had high capabilities of realizing the needed information, locating information, assessing it, and utilizing it, yet they did not evaluate how the IL programmes could be implemented in libraries. According to Zhang, Majid, and Foo (2014), the possession of IL skills by students leads to information literacy. However, the American Library Association (2015) contends that the availability of information is not enough to confer students' information literacy; they have to master the content and expand their investigative skills. A comprehensive description of an information-literate student and programme was offered by Botham et al. (2014) to include recognizing the need for accurate

and complete information, formulating questions based on the need, identifying potential sources of information, and developing the requisite search strategies. Though existing literature confirms that literacy programmes have taken root in various Kenyan universities, their implementation is in doubt because of a number of constraints.

Omondi (2015) found that information literacy programmes in Kenyan university libraries are undermined by students' perceptions, resource constraints, conservative teaching methods, and a lack of computer literacy programmes and resources to support literacy programs. This gives a general state of ILPs without describing how the core IL programmes were affected by the limited resources. A study by Karimi (2017) on the Kenya National Library Services revealed that the utilization of documented resources was the most likely strategy utilized in training, as revealed by library patrons as well as staff. Other strategies identified in that research comprised the utilization of tour guides, illustrations, and personalized training.

Nevertheless, a number of library patrons believed the strategies were not as effective compared to management and members of staff who believed the strategies were actually effective. As much as the staff indicated that certain material were being allocated for use by adult patrons, the researcher was unable to differentiate them from other libraries. Research has also pointed out the need for IL in the utilization of Kenyan digital libraries. A survey by Ringeera (2017) revealed that the problems experienced by library staff and patrons of digital libraries are due to the following broad elements: management policies, policies related to infrastructure, assurance of quality, patrons' attitudes in association with digitization, network reliability, and connectivity, policies related to systems, and training. To tackle these problems, the research suggested improvements to the infrastructure of ICT

in the library, the management of change and staff, as well as patron training. However, he did not report on the management of IL programmes with regard to the digital divide.

These challenges are being experienced in Kenyan libraries despite empirical evidence that libraries in Kenya have adopted the use of ICT tools. Odongo (2017) found that a number of the surveyed libraries were computerized. Actually, the services that had been computerized included the OPAC, internet access, e-journals, e-brinks, and circulation. Among the key elements revealed to challenge the adoption of ICT were the software and hardware for the computers, which were overpriced. Notwithstanding the challenges, participants agreed strongly that the enhancement of ICT influenced information provision and access. Namenya (2014) cited other challenges facing public libraries, such as inefficient bandwidth, inadequate security protocols, resources being inadequate and slow connectivity, as crucial problems facing the use of research facilities by postgraduate students.

However, the bulk of the studies on the use of ICT and information literacy were done in the libraries at the university, to the exclusion of libraries in technical institutions. For example, a study by Nyambeki (2016) found that the issues were incompatible. In relation to this assessment of the right technology for automation being available, it was established that the appropriate technology was merely available on a moderate scale for the automation of the library. There was a moderate rating in regard to the e-resources provided. This showed that despite the automation of academic libraries receiving adequate commitment, there wasn't adequate training on ICT regarding such technology, and there was barely a moderate provision of e-resource facilities.

Kingori (2015) found that information literacy programmes were present in Kenyan universities as early as the 1980s but lacked a systemic approach and policy framework. With the advent of the internet age, which led an explosion of information, Kenyan libraries failed to satisfy the information needs created by the new technologies. Kavulya (2018) noted that university libraries lacked adequate resources, funds, and information materials, and trained staff. These deficiencies limited the role of the libraries in boosting research and learning. This was compounded by manifest neglect in institutionalizing information literacy programmes as a function of university libraries. From these studies, limited research is reported from technical training institutions, hence the need to carry out this research.

### **2.3 Implementation Strategies of Information Literacy Programmes**

The development, adoption, and implementation of ILPs are complex undertakings that require elaborate strategies to make the a success and also ensure sustainability, ease of use, acceptability, and productivity. This was reported by Idiodi (2015), who added that making information literacy a strategic issue for an institution was the starting point of the strategy that enables institutions of learning and transformative teaching to produce students who are independent information users. The study will seek to establish if technical institution libraries incorporate implementation strategies as suggested by authorities and the findings of empirical research.

According to Levey (2016), Onsorinde, Adekiya and Adyemo (2017) and Maina (2014), equipping library users with information literacy, retrieval, and computer skills was an important start strategy depending on the need, capability, and preference of the library,

adding that the information should be on paper or in electronic form provided there is proper library use, hence making the content relevant to the environment, dynamics, and needs of users. However, they also noted that most of the information literacy content was developed for the environment in Europe and America and was thus far removed from the realities in Africa. Tiluwade, Myers and Andrade (2019) noted that an effective strategy for rolling out an information literacy program in a library should be supported by effective policies, especially on the use of ICT facilities. Cats and Lau (2018) advise that the guiding strategy should be to make students literate in the reception, storage, transmission, and use of information.

Pejora (2016) was of the view that teaching information skills in the curricula should be the necessary support strategy in a library literacy program. Grassia and Kaplowitz (2019) found that the teaching of bibliographic information by librarians should be simplified and other pertinent user information added. These added skills have been noted to include searching and evaluating information for quality from different sources and establishing the manner of utilizing the information (Moje, 2012). Kingori (2015) contributed to the emerging strategies by libraries in implementing information literacy programmes in a study that found that successful libraries are moving away from conventional card catalogs and transitioning to the use of digital resources, and teaching users how to use search engines. This strategy was supported by Bernard (2019), who observed that libraries should avail old information in new formats while suggesting the use of databases.

Other strategies include changes in manpower roles and developing student-centered teaching methods. The librarians should adapt to the new roles and obligations of guiding even the students who are reluctant to seek information on the use of the library and the

technological resources. Thus, it is reported by Levy (2019) and Probert (2019) that librarians have to be multi-skilled to embrace new teaching methods and should include offering tutorials in multi-media format to make them appealing to library users (Shule, 2017). Kangas (2016) reported that the library should teach other competencies required in society. While scholars have highlighted the operational standards, this study will investigate the management of IL programmes in selected technical institutional libraries. The study will explore operational strategies aiding in the advancement of an effective IL program that is characterized by user satisfaction.

According to Piece (2019), the library should conduct user surveys to determine information needs and gaps in access to information and understand the information-seeking behavior of users so that they can configure and avail themselves of frequently sought information. Hornby (2015) had earlier observed that libraries should investigate the state of literacy among users and librarians, establish the information literacy expectations and effectiveness of the programs, assess infrastructure, and consider suggestions from stakeholders, including college faculty, administrators, and students.

#### **2.4 Frequency of Reviewing Information Literacy Programmes**

A review of programme is a procedure for measuring accomplishment that stresses the basic programme efficiency. Bracke, Maybee and Weiner (2016) argue that reviewing normally incorporates more strategies of evaluation and is focused on the likely results of the program. Therefore, it needs to incorporate progress measurement of achieving the goals of the program, and evaluation of the blending with the course and curricula, and evaluation of accreditation and institution (ACRL, 2012). In regard to ILPs in the library, Marzal (2015)

describes review as a procedure for betterment and enhancement. Therefore, it needs to be associated with quality, and it needs the prerequisite strategies to assess the qualification process (Marzal, 2015).

Additionally, he argued that when an organization creates and executes an IL program, it must have a mechanism for evaluating and monitoring it so as to determine its efficacy. The explanation of Kendra (2018) is that reviewing efforts to improve information literacy in the library is on a practical level offering an essential chance to guarantee that those participating in literacy instruction, together with administrators of universities and the library, are well positioned to strengthen the multitude of factors that culminate in the accomplishment of a data literacy programme. Evaluation is a crucial element that exemplifies the program's best practices, according to the Institute for Information Literacy of the Association of College and Research Libraries (ACRE), which supports Kendra's (2018) assessment of programs related to IL. It has also been emphasized by the Australian and New Zealand Institute for Information Literacy (2016) that the review of the existing ILPs goes a long way in the ongoing process of enhancing these programs, directly measuring progress in establishing if their objectives and goals are being met, blending with the assessment of the curriculum and with courses together with the evaluation of the institution, and implementing several strategies and review purposes.

By examining several program aspects, ACRL (2016) expands on its analysis of IL programs. The Association has outlined certain rules and performance metrics that are focused on the requirements of higher education students at all levels. Someone is considered by the standards to be information literate when: they are capable of articulating and defining their information need; they can efficiently and effectively acquire the information they need;

information sources can be critically evaluated by the student and sources and include some information within their knowledge value system and base; group members, individuals, and students effectively utilize information to attain a particular purpose; and students comprehend several social, legal, and economic matters surrounding the utilization of information and its acquisition and utilization legally and ethically.

The standards are regarded as befitting standards for the effectiveness of information competencies within universities globally, as considered by Syamalamba (2017). They also describe the different results for evaluating the progress of students with regard to IL. It is argued by the association that these results are a strategy for offering direction for librarians and faculty members in establishing local strategies for measuring how students learn with regard to the mandate of the university, which basically should be aligned with the ILPs of the library.

Additionally, the association highlights that students' entire skills in IL need to be assessed, collaboration be made between librarians and the teaching staff and the creation of an instrument for assessing the method as it is aligned with certain disciplines because information literacy reveals itself in a particular way in the creation of knowledge, the activities of scholars, and the process of publication is in such disciplines (ACRL, 2016). In the absence of this wider view, there may be the development of services and programmes that are fantastic individually but disjointed when approached comprehensively (ACRL, 2016).

## **2.5 Perceptions of the Implemented Information Literacy Programmes**

In their research on the perceptions of implemented Information Literacy Programmes

(ILPs), Delora et al. (2011) revealed that instructions that are passive in nature are not a style that is effective in teaching and results in a positive behavioral and psychological outcome. Instructions that are active instead yield effects that are positive. Essentially, the level of active information literacy instructions provided doesn't matter; one particular session of instructional learning can be enough to result in a substantial outcome in student learning. This is certainly inviting information for those practicing IL working in environments of higher education that are constrained by resources, contrary to technical training institutions, which are rather technical and smaller.

Blau (2016) produced a number of key findings in his study on the information literacy concept: whereby forty percent of members of faculty in the universities of the study were not aware of what IL meant though almost all considered the expertise to be quite essential; members of faculty in those universities believed IL to be conducted through unofficial means and are not a way of collaborating with librarians; in as much as they preferred classes of library orientation, a number of participants accepted the involvement of librarians and trusted that IL needed to be conducted through collaborative means including the librarians and the lecturers; having identified restriction of time as being among key challenges in achieving collaboration, this they could still overcome. From these studies, there is a need to find out if the recommendations for collaboration and integration have been used to achieve the promotion of IL in technical training institutions, as highlighted in universities.

Ogunlana et al. (2018) revealed that student's perceptions, experiences, and attitudes are considerably associated with their skills related to information literacy. The outcome of their study was thought to be useful in offering structures for crafting new strategies for IL

programs. Information literacy skills are regarded as key skills for students, and it is believed that specific skill levels need to be achieved. Additional research needs to be conducted to describe the elements of IL skills, and learning institutions particularly technical institutions, are advised to embark on IL initiatives to fully satisfy their users. This study will explore if the same is experienced in TTI libraries.

## **2.6 Challenges in the Implementation of Information Literacy Programmes**

The implementation of Information Literacy Programs (ILPs) among different types of libraries has suffered differing challenges, and this study will investigate if libraries at the selected technical institutions in Nairobi are afflicted by the challenges that also affect the general performance of libraries. Although ILPs ought to be a major component of library existence, Darch and Underwood (2017) found that the growth of information literacy programmes in African universities was being hampered by poor network infrastructure, inadequate computers, reluctance to accept new technologies, and over-reliance on recorded texts by the libraries. Additionally, libraries in Africa failed to keep pace with the basic necessities to keep improving ILPs. For example, Snarley (2018) found that libraries failed to integrate information literacy as part of mainstream education. This study will interrogate these challenges in relation to technical institutional libraries and propose recommendations.

Dadzie (2019) found a few obstacles to the successful adoption of ILPs in Ghanaian university libraries. These issues included a lack of management support for ILP initiatives, a dearth of sufficient information about IL, and staff and departments who were unwilling to administer ILPs. Sitima-Ndau (2015) conducted a similar study to see whether ILPs offered

at the University of Malawi's Chancellor College were sufficient for giving students the necessary abilities. The study demonstrated that the degree of IL provided to university students was insufficient and did not do enough to give pupils the necessary computer skills or data-searching abilities. While scholars report inadequacies in the implementation of ILPs in addition to curricular and financial challenges, electricity failure, and high internet charges among university libraries, this study will evaluate challenges in the implementation of ILPs in selected TTI libraries in Nairobi County, Kenya.

Studies by Maina (2014) reported some challenges facing ILPs as work overload for the library staff, lack of proper coordination among the librarians and faculty, limited support from the administration, inadequate teaching and learning resources, and the perception of students towards the programs. According to a study by Reed, Kinder and Cecile (2017), there is a manifest lack of linkages between ILPs and curriculum development. The same study was extended to the day-to-day teaching and learning activities, whereby assignment development, in-class teaching, and assessment were not linked to the information literacy training. West (2013) found that the lack of collaboration between the educators and the librarians was extended to failure to visit each other and in planning, budgeting, and provision of resources. From this finding, most of the challenges in the implementation of ILP were a result of resource inadequacy, adding that many libraries have shortages of textbooks, journals, databases, interactive videos, ICT infrastructure, internet bandwidths, and multi-media systems (Olubayi, 2015; Jelagat, 2015).

Alarony and Bronstein (2013) noted that students also lack the drive and motivation to use information resources and are overly dependent on web resources. This was fueled by poor perceptions of information literacy programmes by library users who are not well-oriented

and trained in their use and benefits (Franklin, 2015). Moreover, poor teaching methods also affect the implementation of information literacy programmes especially where tutors are inclined to talk and chalk teaching methods without referring students to resources in the library (Kiruhi, Githua & Mboroki, 2019). Ogola and Onsongo (2019) found that failure to monitor and evaluate students' use of library resources was detrimental to developing effective literacy programs.

This was a result of tutors relying on lecturing method and failing to use the methods of teaching presented by information literacy programmes such as simulations, the use of resource persons, and computer-aided tutorials. As a result of the use of traditional teaching methods, students pass through and graduate from tertiary institutions without mastering the art of information retrieval and use, rendering us nugatory and irrelevant to the development of information literacy programmes (Kavulya, 2018). There is also a trend in tertiary institutions whereby the development of information literacy programmes is seen as a function of the library alone, thus limiting the support and consumption of information by the targeted stakeholders. More studies on IL programmes in tertiary institutions demonstrate computer illiteracy among students and librarians as a widespread constraint (Mugyabuso & Stilwell, 2018). Additionally, Kinengyere (2017) noted the shortage of computers in libraries, inappropriate training and orientation of library users, and limited internet bandwidth as factors undermining the development of effective literacy programs.

Tilwawale et al. (2019) found that policymakers in many tertiary institutions and libraries lack information skills, leading to the development of ineffective policies that lead to a lack of support for information literacy programmes by key stakeholders. From the above studies, there is a glaring gap in the management of ILPs in technical institutional libraries, as

reported by Muchiri (2016), Gyesei (2018), and Gross (2017), who noted that the digital divide constraints are not yet addressed in university libraries, adding to poor orientation, challenges in internet connectivity, and inadequate training of librarians. This research will determine the challenges experienced in the implementation of ILPs in selected technical training institution libraries.

## **2.7 Summary and Gaps in Literature Review**

A study on the efficiency of Information Literacy Programs in academic libraries was undertaken by Were (2019). The study focused on the Tangaza University College Library in Kenya. The study was inspired by the underutilization of library resources, which was a result of a lack of information literacy skills. It considered information literacy practices, whether the library was achieving IL objectives, mechanisms of evaluating IL programmes and factors that influenced IL programmes. The seven faces of IL proposed by Christine Bruce were used. Both students and the teaching staff were taken into account for the sample aim in (2019). In order to gather data, questionnaires and interview schedules were used.

A study on information literacy among library and information science professionals was carried out in India by Thanuskodi (2019). As its objectives, the study considered the professionals' information-seeking skills, their information-organizing skills, their information-providing skills, the challenges of obtaining information literacy skills, and the most preferred tools to seek information. Questionnaires were used in this study.

Webala (2019) evaluated the integration of information literacy into academic curricula at a few Kenyan universities in Nairobi and Kiambu counties. The study was interested in

mainstreaming information literacy programs. It considered socio-cultural learning theory and utilized members of the faculty in this descriptive study, with questionnaires being the tool used for collecting their responses. The review of the literature has shown that there is a gap when it comes to considering ILPs, particularly in technical training institution libraries in Kenya.

Since most studies on information literacy programs among libraries were always conducted among libraries in universities, the awareness, user competence, and attitude toward the use of IL programs among libraries in technical learning institutions in Kenya have not been fully utilized. A review of ILPs has been documented by scholars as a vital component of IL (Bowden, 2017; UNESCO, 2015), yet there are limited studies on basic literacy in technical training institutions in Kenya.

To address research questions, the study will assess if the management of ILPs presented in the literature review from libraries elsewhere has any similarities or differences with the management among TTI libraries.

The study will also seek to investigate if the perceptions among users, implementation strategies, challenges faced during implementation, and review of ILPs in libraries from technical institutions affect the performance of TTI libraries as it does on other types of libraries as reviewed in the literature.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 Introduction**

The techniques and methodologies are provided in this chapter. The chapter expounds on the design of the study, the target population, the technique of sampling, and the size of the sample, as well as the tool for acquiring data, the procedure, and the pilot study. This section also includes discussion, data validity and reliability, data analysis and presentation methods, logistical considerations, and ethical considerations in research.

#### **3.2 Research Design**

The study adopted a descriptive survey design in order to critically describe and report on the characteristics of a specific population, group, or phenomenon on strategies for management of information literacy programmes in selected TTI libraries in Nairobi County, Kenya. According to Kombo (2006) descriptive survey is a type of design utilizes questionnaires and interview schedule for population sampling. It provides a detailed account of the current state of affairs, which is essential for building foundational knowledge in a particular area of study.

#### **3.3 Location of the Study**

Kothari (2004) acclaimed that a researcher needs to comprehend the locale of the survey before embarking on a study to enable the realization of the study objectives. This study was

conducted in selected technical training institution libraries in Nairobi County. There are 58 institutions designated as technical institutions in Kenya. For the purpose of this study, five (5) TTIs located in Nairobi County were selected using stratified random sampling. Each of the institutions selected for this study has some form of information literacy program that has been in operation for the past five years and helps in the supply of information to meet diverse user needs. The institutions under study were also selected from Nairobi County due to their large size and accessibility, which allowed the researcher to undertake an in-depth investigation of the study.

### **3.4 Target Population**

Mugenda and Mugenda (2003) define population as an entire group of individuals, items, or elements that the researcher is interested in studying and drawing conclusions about. It represents the larger, often theoretical, group from which the research sample is drawn. The target population is the group to which the research findings are intended to be generalized. Hence, the target population comprised of five (5) head librarians, one thousand and thirty (1030) teaching staff and nine hundred and thirty five (935) students from the five (5) selected technical training institutions in Nairobi County. See the breakdown in the below Table 3.1

**Table 3.1 :Target population**

<b>Institution</b>	<b>Librarian</b>	<b>Teaching staff</b>	<b>Students</b>	<b>Total</b>
Kenya Technical Trainers College (KTTC)	1	233	203	437
Karen Technical Training Institute for the Deaf (KTTID)	1	39	74	114
Kasarani Technical and Vocational College (KTVC)	1	248	216	465
Nairobi Technical Training Institute (NTTI)	1	356	301	658
PC Kinyanjui Technical Training Institute	1	154	141	296
<b>Total</b>	<b>5</b>	<b>1030</b>	<b>935</b>	<b>1970</b>

### 3.5 Sampling Techniques and Sample Size

#### 3.5.1 Sampling Techniques

Complete enumeration technique was used in sampling first strata which is the head librarians category from the five (5) selected technical training institutions. Complete enumeration involves including every member of a particular strata in the study. This sampling technique is often used when you have a small number that is manageable (Ravitch & Carl, 2016). Thus, all the five (5) head librarians were selected for data collection with the use of interview schedule. Furthermore, Stratified sampling was adopted to obtain a sample size with equal representation from all the strata. Then proportionate stratified sampling was used to determine the participants within every stratum. In determining the sample size of the faculty members and the students, Krejcie and Morgan (1970) formula was used.

For a target population of 1030 as per Faculty member at 5% margin and 95% confidence level, a sample size of 278 is most appropriate for the study. Also, for a population of 933 students at 5% margin and 95% confidence level, a sample size of 217 is appropriate. In apportioning sample size as per each category across the five (5) selected institutions, proportionate stratified sampling was used to determine the participants within every stratum as shown in the formula below:

$$n_n = (n/N) N_n$$

Where  $n_n$  was the sub-sample size for each stratum,  $n$  was the sample size,  $N$  was the population size, and  $N_n$  was the population size for each stratum. In consideration of the fact that the information required for the study should come from people best qualified by virtue of their positions to provide it, Ngulube (2020) opines that an optimum sample size is one that is efficient, representative of the mother population, reliable, and flexible.

**Table 3.2: Sample Size Apportionment**

<b>Institution</b>	<b>Head Librarian</b>	<b>Teaching Staff</b>	<b>Students</b>	<b>TOTAL</b>
Kenya Technical Trainers College (KTTC)	1	62	47	
Karen Technical Training Institute for the Deaf (KTTID)	1	11	17	
Kasarani Technical and Vocational College (KTVC)	1	67	51	
Nairobi Technical Training Institute (NTTI)	1	96	70	
PC Kinyanjui Technical Training Institute	1	42	32	
<b>Total</b>	<b>5</b>	<b>278</b>	<b>217</b>	<b>500</b>

**Source: Researcher (2021)**

### **3.6 Data Collection Tools and Procedures**

The researcher made use of questionnaires and interview schedule as the key research instruments in the study.

#### **3.6.1 Questionnaires**

A questionnaire is described by Mugenda and Mugenda (1999) as providing comprehensive answers to compounded issues. The popularity of questionnaires is a result of their ability to acquire data easily and also of their effectiveness in terms of cost of administration and construction. Therefore, the researcher found questionnaires to be an appropriate and cost-effective tool for this study. For the personnel and students of the chosen Technical Training Institutions, a standardized questionnaire was created (Appendix II). This was necessary because the researcher sought the same information from these two categories of respondents. Questionnaires that are open-ended enable the collection of different responses from respondents, though they are challenging to statistically analyze because it's mandatory to reduce and code the data in a particular way. Questions that are closed-ended are easier to statistically analyze, though they in a big way restrict the respondent in their responses. Several researchers favor the use of a Likert scale. This is due to its perceived ease of statistical analysis (Jackson, 2009).

In order to learn more about the tactics utilized to develop IL programmes and how users felt about them once they were put in place in the selected institutions, the researcher employed questionnaires with closed-ended Likert scale questions on each of the study variables. The questionnaire also helped gather information on the frequency with which the implemented

ILPs were reviewed and the main challenges the librarians were facing during the implementation process of ILPs in their institution libraries and helped to probe the way forward. Questionnaires were administered to the students, who filled them out on the spot. The study's strategy for the teaching staff involved giving the participants surveys first and picking them up afterward. During the interim, a follow-up visit was conducted to make sure the response rate was improving. 500 questionnaires in all were distributed. This comprised 278 questionnaires distributed to the teaching staff and 217 questionnaires distributed to students.

### **3.6.2 Interview Guide**

The researcher created an interview schedule in accordance with the research goals. An interview, according to Balarabe (2012), is a method of asking respondents a series of questions while speaking with them face-to-face. According to Gay (2011), the interview mode of data collection was adopted since respondents could not be directly watched, they could provide historical information, and it allowed the researchers to control the questions they asked. The researcher scheduled in-person interviews with 5 head librarians at the chosen institutions. Out of the 5 targeted interviews, 3 were successfully conducted, while 2 were not. The librarians were absent during the study and were not available for over-the-phone interviews. The schedule (Appendix III) was used to get detailed and technical information on the management of ILPs in selected TTIs in Nairobi County.

### **3.7 Pilot Study**

The instruments used in this study underwent a successful pre-test at the Nakuru Training Institute (NTI), selected using simple random sampling. This institute was chosen due to its alignment with the primary study's mission and vision of producing highly skilled graduates. As suggested by Orodho (2013), the pilot study sample size should ideally represent at least 10% of the main study sample. A sample size of 50 respondents was used in the pilot study. Therefore, the researcher collected quantitative data from 20 students and 29 teaching staff through questionnaires. Additionally, personal interviews were conducted with the head librarian at the institute. The interview session was successfully conducted and all questionnaires distributed for this piloting were returned, recording a 100% return rate. Their responses were only used in realigning the instruments and then disposed of. The primary objective of this pilot study was to identify and address any ambiguities, rephrase unclear sentences, ensure sufficient space for responses, and make any necessary adjustments to the instrument's layout. During the pilot study, it became evident that some of the statements in the questionnaire posed challenges for comprehension. To ensure clarity for the respondents, the researcher needed to simplify certain statements for better understanding. Furthermore, the insights gained from the pilot study guided the refinement of question items, eliminating ambiguity and enhancing overall clarity. The responses used in the pilot never formed part of the main study.

#### **3.7.1 Validity**

In order for an instrument to be considered valid, it must be able to measure what it is supposed to measure (Bui, 2009). The validity of the instruments was confirmed by the university supervisor at the Department of Library and Information Science. The individual

evaluated the instruments and provided helpful modifications and critiques that improved the validity of the instruments the researcher worked with.

### **3.7.2 Reliability**

The ability of the instrument to deliver repeatable results over time is referred to as dependability (Orodha, 2009). There are various techniques to assess an instrument's dependability. The simplest reliability test is the test-retest approach, which involves evaluating the same subjects again after some time to show that the findings are correlated (Michael, 2015). Through the test-retest procedure, the instrument's dependability was assessed. The instrument was deemed reliable after the pilot study was performed with new respondents two weeks later and the same outcomes were obtained.

### **3.8 Data Collection Techniques**

In this study, a total of 1970 people were targeted, with a sample size of 500 drawn from the following institutions: 217 students, 278 teaching staff, and 5 head librarians. Data was gathered from students and teaching staff using questionnaires, and head librarians using an interview schedule. During the data gathering exercise, 100 students and 175 teaching staff completed questionnaires, and three head librarians participated in interviews.

The researcher and two well-trained research assistants utilised a questionnaire to obtain quantitative data from the respondents. The workers on duty at Kenya Technical Trainers College and PC Kinyanjui Technical Training Institute assisted the researcher in prepping and ushering in the students at the reading carrels at the part where the tool was administered. The researcher moved from section to section among the two training institutions to administer the instrument to the staff.

The researcher interacted with students at Karen Technical Training Institute with the help of the dean of students' office. The researcher also accompanied the workers to their various offices to administer the questionnaire.

At Kasarani Technical and Vocational College, and Nairobi Technical Training Institute, the scenario was also the same. The researcher manually retrieved the questionnaire with the replies at the end of each administration with the assistance of trained assistants from the five selected training institutions. Individual arrangements were established with the 5 head librarians from each institution, and interviews were conducted face-to-face within the institutions, to obtain qualitative data from interviews with head librarians.

### **3.9 Data Analysis and Presentation**

In the analysis and presentation of quantitative data derived from closed ended Likert Scale questionnaire items, a descriptive statistical method was applied. In this study, descriptive statistics such as tables and percentages were used. A systematic coding system was used to analyse qualitative data using a theme approach. The majority of the qualitative data was acquired from the interview schedules of the chief librarians. The data was recorded in both audio and written formats, utilising voice recorders and a notebook.

The qualitative dataset was coded using an inductive approach in which codes were derived from the data. In this example, codes were created to meet specific study objectives. There were two coding sessions. The first cycle involved identifying initial categories, which were then uploaded to an excel spread sheet and more codes were added during the coding process. The second coding cycle was used to identify categories by combining the codes generated

in the first cycle. The first cycle, according to Tracy (2013), is to characterise the data, and the second cycle is to organise the codes into categories. To convey quantitative statistics, the data was presented in tables and graphs.

### **3.10 Logical and Ethical Considerations**

The researcher took the following steps to ensure that the study was conducted in accordance with the strictest standards of ethical conduct in research: first, she obtained an introductory letter from the Graduate School of Kenyatta University through the Department of Library and Information Science; next, she applied for a research permit from the National Commission for Science, Technology, and Innovation (NACOSTI). With the help of the permit, the administration of each technical institution chosen for research in Nairobi County was consulted.

The researcher next went to the chosen institutions to learn more about them generally and to gather data there. To get their agreement, all participants were made aware of the study's objectives. The respondents' anonymity was likewise guaranteed. By informing the study participants of its goals and their part in them, a positive relationship with them was maintained. Further, verbal consent from the respondents was sought before questionnaires were administered. Finally, all ideas and thoughts from different researchers were duly recognized and appreciated to avoid plagiarism in the research.

## CHAPTER FOUR

### PRESENTATION OF FINDINGS, INTERPRETATION AND DISCUSSION

#### 4.1 Introduction

In this chapter, research findings were presented, interpreted, and discussed in relation to the research objectives, which include: establishing the implementation strategies of information literacy programmes (ILPs), the frequency at which ILPs were being reviewed, determining the perceptions of the implemented ILPs, and identifying the main challenges associated with the implementation of ILPs in selected Technical Training Institution Libraries in Nairobi County, Kenya.

The findings provide information based on the questionnaire and interview response data. Both quantitative and qualitative analyses of the study's data were performed. The Statistical Package for the Social Sciences (SPSS) package version 23 was used to clean, code, and enter quantitative data obtained from fully completed questionnaires. Narratives and descriptions were used to assess the qualitative interview data.

#### 4.2 Response Rate

This study focused on a total of 500 respondents, which consist of 5 head librarians, 278 teaching staff, and 217 students from selected technical training institutions. As a result, 495 questionnaires were given out to the teaching staff and students in order to capture quantitative data. In order to collect qualitative data, 5 head librarians were interviewed out of which only 3 were available for the schedule interview. The questionnaire and interviewed response rate is outlined in Table 4.1.

**Table 4.1: Response Rate**

<b>Category</b>	<b>Distributed</b>	<b>Returned</b>	<b>Percentage</b>
Teaching Staff	278	175	63
Students	217	100	46
Head librarians	5	3	60
<b>Overall</b>	<b>500</b>	<b>278</b>	<b>56</b>

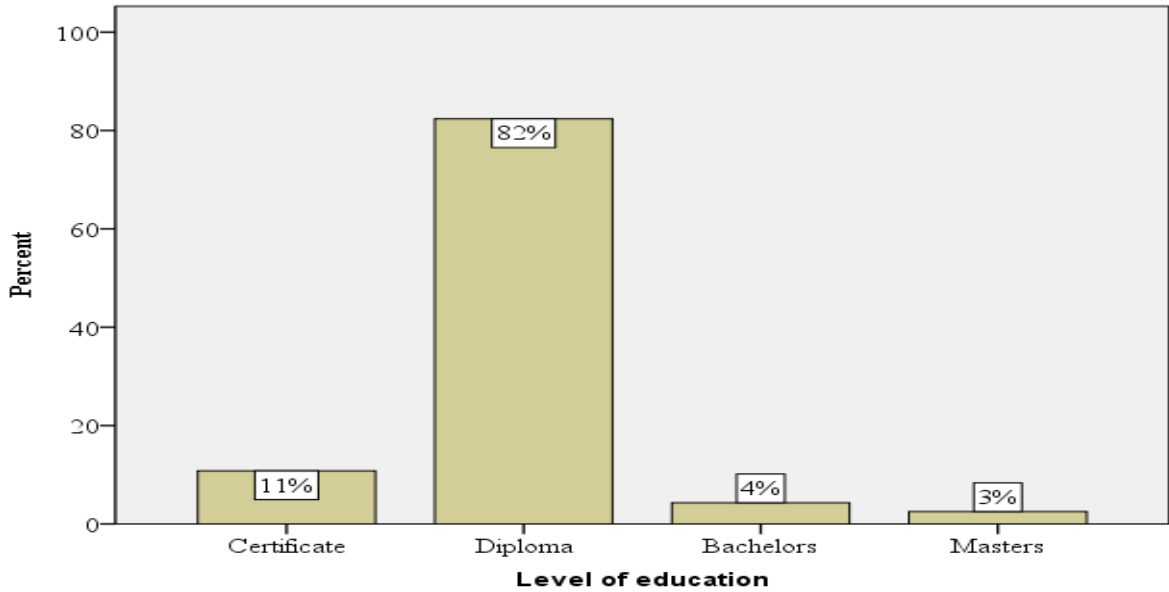
**Source: Research Data (2022)**

A total of 278 out of 500 responses were successfully, reflecting a 57% overall response rate. This constituted 175 questionnaires out of 278 distributed to the teaching staff, reflecting a 63% response rate, and 100 questionnaires out of 217 distributed to students, reflecting a 50 % response rate. A total of 3 out of 5 librarians were interviewed, giving a response rate of 60%. The overall response rate was considered acceptable and adequate for deriving inferences. According to Mugenda & Mugenda (2009), a response rate of more than 50% is considered trustworthy and acceptable. The credibility and suitability of this study are therefore based on this, allowing for its analysis and generalization.

In this study, the three librarians who were interviewed were identified using codes L1-L3.

### **4.3 Level of Education of the Respondents**

The study examined the composition of the respondents in terms of their highest academic qualification. The majority of participants (82%) had diploma, 11% certificate, 4% bachelor's degree and 3% master's degree. The findings are captured in Figure 4.1.



**Figure 4.1: Highest Level of Education**

**Source: Researcher (2022)**

Figure 4.1 indicates that most of the participants, 269 (82%), had attained diploma level. This implies that the participants were able to competently provide feedback on the issues raised in the questionnaires and interview schedules. It also implies that the participants had a cognitive understanding of ILPs and were ready to be taken through the IL trainings.

#### **4.4 Implementation Strategies of Information Literacy Programmes**

A Likert scale was used in a series of statements to elicit responses in relation to the implementation strategies of information literacy programs in selected technical institution libraries. Table 4.2 shows the outcome.

**Key:** Ranked on a scale of 1-5: 1 = Strongly Agree, 2 = Agree, 3 = Not Sure, 4 = Disagree, and 5 = Strongly Disagree.

**Table 4.2: Implementation Strategies of Information Literacy Programmes (ILPs)**

Statement	Strongly Agree	%	Agree	%	Not Sure	%	Disagree	%	Strongly Disagree	%
The library has some form of information literacy program in place.	10	3.6	253	91	4	1.4	6	2.2	5	1.8
Students undergo library orientation at the beginning of their course.	25	9	240	86.3	2	0.7	6	2.2	5	1.8
User education is provided by the library.	32	11.5	221	79.5	2	0.7	12	4.3	11	4
Library patrons are provided with library tours to become familiar with the library resources and services.	7	2.5	209	75.2	10	3.6	27	9.7	25	9
Library staff provides personalized training on the use of library resources.	18	6.5	231	83.1	7	2.5	11	4	11	4
The library has been conducting sessions on search strategies.	5	1.8	192	69.1	13	4.7	28	10.1	40	14.4

**Source: Researcher (2022)**

Table 4.2, it's evident that the majority, comprising 253 (91%), expressed agreement, while 10 (3.6%) strongly agreed. Conversely, a smaller fraction of 6 (2.2%) disagreed, while 5 individuals (1.8%) strongly disagreed. Additionally, 4 (1.4%) were unsure regarding whether the library had an established information literacy program in place. The data illustrates a predominant positive perception among respondents regarding the form of information literacy program in place.

The majority of the respondents, 253 (91%), agreed that the library has some form of information literacy program in place. This indicates that the libraries in selected institutions

have some form of ILPs. This is supported by the study by Agufana *et al.* (2018), who established that libraries within technical training institutions in Kenya had some form of ILPs as a way of enabling students to take advantage of the resources and services provided by the libraries. This indicates that libraries within technical training institutions were implementing at least some form of ILPs that needed to be properly implemented and managed for effective and efficient service delivery and use of the library resources.

During the interview sessions, three librarians were asked to describe the forms of ILPs in their libraries. One of the librarians (L1) indicated that *“our library has a lot to offer in terms of information literacy programmes. We have instituted several programmes that are currently running. These include taking students through library orientation and monthly user education programmes”* while (L2) stated that *“the library, apart from providing orientation to our new patrons, also offers classroom-based information literacy education. This is a new concept that we have just developed,”* and the librarian (L3) said that *“of course, students, once they join the institution, are taken through library orientation. This is mandatory. Then we also provide user education targeting individual course units that we feel can be integrated with information literacy to reach a larger audience. And we have just started on providing information literacy as part of an examinable unit that students take”*.

Similarly, finding also shows that 240 (86.3%) agreed that students undergo library orientations, 25 (9%) strongly agreed, 6 (2.2%) disagreed, 5 (1.8%) strongly disagreed, and 2 (0.7%) were not sure. This means that majority of the respondents, 240 (86.3%), had agreed that students undergo library orientations at the beginning of their courses. This indicates that libraries in Technical Training Institutions (TTIs) were conducting library orientation for students to help them familiarize themselves with the library and its services.

These results are in tandem with the findings of Mukundi and Njuki (2019), who established that indeed, library orientations were being conducted in the TTIs. This can be perceived to mean that libraries in these institutions were keen on taking new students through library orientations as a form of information literacy.

In the interview sessions, librarians were asked if students undergo library orientation at the beginning of their course. One of the librarians (L1) indicated that *“orientation is offered at the beginning of every semester, targeting new students since that is when we admit new students to the institution,”* while (L2) stated that *“new students are always provided with an opportunity to be oriented to the library once admitted for their studies. This takes place at the beginning of the semester,”* and (L3) noted that *“orientation of the library is a process that takes place when the new semester starts. This is a program that targets newly admitted students at their point of entry into the program”*.

In term of user education provided by the library. The respondents were asked if user education is provided by the library. The findings show that 221 (79.5%) of the participants agreed, 32 (11.5%) strongly agreed, 12 (4.3%) disagreed, 11 (4%) strongly disagreed, and 2 (0.7%) were not sure. Table 4.2 indicates that most of the respondents, 221 (79.5%), agreed that user education is provided by the library. These findings indicate that libraries in TTIs were keen on providing information literacy, as shown by the implementation of user education. This is revealed by the results of a study by Mukundi and Njuki (2019), which found that user education was a key component of information literacy being practiced by libraries in TTIs. The study, however, noted that user education was not being practiced by all TTIs in Kenya. This means that user education was being practiced by libraries in TTIs, even though not by all institutions.

In terms of library tours for patrons, the respondents were asked if library patrons are provided with library tours to help them familiarize themselves with the library resources and services. The findings show that 209 (75.2%) agreed, 27 (9.7%) disagreed, 25 (9%) strongly disagreed, 10 (3.6%) were not sure, and 7 (2.5%) strongly agreed. The table 4.2 also indicates that most of the respondents agreed that library patrons are provided with library tours to help them become familiar with the library resources and services. These findings indicate that libraries in technical training institutions were taking their patrons on library tours to familiarize themselves with various library resources and services. These findings were supported by Agufana et al. (2018), who found that libraries in TTIs had taken up library tours as a strategy of enhancing library usage. The library tours were adopted when libraries in TTIs realized a lack of maximum library usage. These findings therefore mean that library tours can be strategically used to promote information literacy programmes.

Furthermore, in order to determine the provision of personalized training, respondents were asked if the library provides personalized training on the use of library resources. Findings show that 231 (83.1%) agreed, 18 (6.5%) strongly agreed, 11 (4%) disagreed, 11 (4%) strongly disagreed, and 7 (2.5%) were not sure. The table 4.2 reveals that most of the participants, 231 (83.1%), agreed that the library staff provide personalized training on the use of library resources. This means that personalized training is a strategy that libraries in TTIs can employ to provide customized services to their users. This is in tandem with a study conducted by Mukundi and Njuki (2019) and Agufana *et al.* (2018), who found that libraries in TTIs were starting to appreciate the value of personalized training for patrons to enable them to optimize the usage of their resources.

In terms of conducting sessions on search strategies, respondents were also asked if the library has been conducting sessions on search strategies. The findings show that 192 (69.1%) agreed, 40 (14.4%) strongly disagreed, 28 (10.1%) disagreed, 13 (4.7%) were not sure, and 5 (1.8%) strongly agreed. This means that majority of the participants, 192 (69.1%), agreed that the library has been conducting sessions on search strategies. This indicates that sessions of search strategies were being undertaken with library patrons as a way of making them information literate. Search strategies assist users in identifying and choosing suitable and sufficient information resources. According to Njuki and Mukundi (2019), the information explosion has presented library patrons with the challenge of getting relevant information, and therefore, libraries such as those in Technical Training Institutions were taking their users through search strategy sessions to provide them with skills to maneuver through library resources and services.

#### **4.5 Frequency of Reviewing Information Literacy Programmes**

A Likert scale was used in a series of statements to elicit responses in relation to how frequently ILPs were reviewed. The responses are in Table 4.3.

**Table 4.3: Frequency of Reviewing Information Literacy Programmes (ILPs)**

Statement	Strongly Agree	%	Agree	%	Not Sure	%	Disagree	%	Strongly Disagree	%
The ILPs are reviewed after every orientation using feedback forms.	6	2.2	5	1.8	4	1.4	253	91	10	3.6
Every semester, the ILPs are reviewed to meet the user needs.	5	1.8	6	2.2	2	0.7	240	86.3	25	9
Every month, students received an online link used for assessing ILPs.	13	4.7	5	1.8	28	10.1	192	69.1	40	14.4
At the end of the user education sessions, the library was keen on finding out if the sessions were helpful.	13	4.7	5	1.8	28	10.1	192	69.1	40	14.4
Library patrons could at any time provide information regarding the suitability of its ILPs.	12	4.3	11	4	2	0.7	221	79.5	32	11.5
The library reviews the IL Ps based on the users' training.	10	3.6	27	9.7	7	2.5	209	75.2	25	9

**Source: Researcher (2022)**

The respondents were asked if the ILPs were reviewed after every orientation process using feedback forms. The findings show that 253 (91%) disagreed, 10 (3.6%) strongly disagreed, 6 (2.2%) strongly agreed, 5 (1.8%) agreed, and 4 (1.4%) were not sure. Table 4.3 indicates that most of the participants, 253 (91%), disagreed that the ILPs were being reviewed after every orientation process. This means that orientation was a method being used by the library in imparting IL skills, though it was not being assessed to determine its appropriateness or

effects in imparting IL skills. These results are in line with those of Maro (2018), who found that even though orientation is the most widely utilized approach for teaching students information literacy skills, it is rarely assessed by many libraries due to the large number of users being taken through the orientation process at any given time.

Similarly, the respondents were asked if, every semester, the ILPs were reviewed to meet the users' needs. Findings in Table 4.3 show that 240 (86.3%) disagreed, 25 (9%) strongly disagreed, 6 (2.2%) agreed, 5 (1.8%) strongly agreed, and 2 (0.7%) were not sure. The findings clearly reveal that the majority of the respondents, 240 (86.3%), disagreed that ILPs were being reviewed every semester to meet user needs. This indicates the lack of assessment of ILPs in TTI libraries every semester. As expressed by Maro (2018), who conducted a study of TTIs, and found out that libraries had not put proper measures in place to assess the programmes on a semester basis despite putting efforts into training their users.

In order to support the finding from students and teaching staff, librarians were asked on how often information literacy programs are reviewed through an interview session. One of the librarians (L1) said, *“I wouldn't say that we review information literacy programs as such, but we once in a while just change the content we teach when taking our patrons through library orientation on the basis of the services we provide.”* Another librarian (L2) was of the view that *“we review the content that is incorporated in the information literacy program. So I believe that's one way of reviewing the programme”* while the other librarian (L3) said, *“I can't remember the last time we reviewed the information literacy program. Maybe now we should”*.

In terms of if every month, students received an online link used for assessing information literacy programs (ILPs). The findings show that 192 (69.1%) disagreed, 40 (14.4%) strongly disagreed, 28 (10.1%) were not sure, 13 (4.7%) strongly agreed, and 5 (1.8%) agreed. Table 4.3 reveals that most of the respondents, 192 (69.1%), disagreed that online links were being sent to students every month to assess information literacy programmes. This indicates that the library was not keen on using online links as a channel for assessing ILPs. It can also be perceived as meaning that online links were not effective in assessing ILPs. This is supported by findings from Breakstone et al. (2019), who found out that despite TTI students having certain competencies, only a few of them were capable of evaluating ILPs online.

Furthermore respondents were asked if, at the end of the user education, the library was keen on finding out if it was helpful. The findings show that 192 (69.1%) disagreed, 40 (14.1%) strongly disagreed, 28 (10.1%) were not sure, 13 (4.7%) strongly agreed, and 5 (1.8%) agreed. Table 4.3 reveals that the majority of the participants, 192 (69.1%), disagreed that at the end of the user education, the library was keen on finding out if it was helpful. This indicates that TTI libraries were not evaluating user education at the end of user education to establish their usefulness as an information literacy program review session. Liu et al. (2019) conducted a study and established that user education had a constructive impact on the learning outcomes of students within TTIs. However, no TTI library was keen on evaluating the outcomes of user education, hence missing out on key information on its effectiveness.

The respondents were asked if the library patrons could at any time provide information regarding the suitability of its ILPs. The findings show that 221 (79.5%) disagreed, 32 (11.5%) strongly disagreed, 12 (4.3%) strongly agreed, 11 (4%) agreed and 2 (0.7%) were

not sure. The findings in Table 4.3 show that the majority of the respondents, 221 (79.5%) disagreed that the patrons could at any time provide information on the suitability of ILPs. This indicates that TTI libraries were not keen on evaluating IL programmes based on the perceptions of their users. This would greatly hamper their ability to know the effectiveness of the ILPs. According to Tshuma and Chiganda (2018), despite an increase in interest in providing information literacy programmes, academic libraries have not been so keen on evaluating them. This is perhaps captured in these findings.

In terms of if the library reviews the IL programs based on the users' training. The findings show that most of the participants, 209 (75.2%), disagreed that the library reviews the ILPs based on the users it has trained. These results indicate that TTI libraries are not evaluating the effectiveness of IL programmes since those trained are not reviewed. Jessey et al. (2016) conducted a study on pre- and post-information literacy assessment and established with the findings of this study that academic libraries were not keen on the post-evaluation of ILPs once they had trained users.

Further findings from librarians through an interview sessions describe the way information literacy programmes were reviewed. One of the Librarians (L1) was of the view that *“we have not been able to review our information literacy programmes in a while, though we keep on providing them to our patrons,”* while another (L2) indicated that *“the idea of reviewing information literacy programmes is a good one, though we feel we do not have the capacity to conduct such an exercise given that we only do orientation and the numbers we get are so huge,”* and librarian (L3) noted that *“we have tried reviewing the ILPs in the past without much success; therefore, our information literacy programmes are rarely reviewed.”*

*We work on the assumption that they are effective and continue providing them to our patrons”.*

#### 4.6 Perceptions of the Implemented Information Literacy Programmes

A Likert scale was used in a series of statements to elicit responses in relation to the perceptions of the implemented Information Literacy Programmes amongst users.

**Table 4.4: Perceptions of the Implemented Information Literacy Programmes (ILPs)**

Statement	Strongly Agree	%	Agree	%	Not Sure	%	Disagree	%	Strongly Disagree	%
Information literacy programmes are a channel for creating awareness of library resources and services.	25	9	240	86.3	2	0.7	6	2.2	5	1.8
Important skills were acquired during IL training.	10	3.6	253	91	4	1.4	6	2.2	5	1.8
Users better understand the library when ILPs are well implemented.	18	6.5	231	83.1	7	2.5	11	4	11	4
Information literacy programmes are improving the attitude of library patrons toward using library resources.	32	11.5	221	79.5	2	0.7	12	4.3	11	4
The skills acquired during information literacy sessions allow users to make better use of the library.	7	2.5	209	75.2	10	3.6	27	9.7	25	9

Library patrons get to appreciate the various services provided by the library after being taken through IL programmes	25	9	240	86.3	2	0.7	6	2.2	5	1.8
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**Source: Researcher (2022)**

Table 4.4 shows that the majority of the respondents, 240 (86.3%) agreed that information literacy is a good way of creating awareness of library resources and services. These result are supported by findings from Jelagat (2016), who established that academic libraries were using various channels and methods to create awareness of ILPs among their users. This was to enable users to effectively access and utilize its services and resources.

In terms of important skills acquired during IL training. The findings indicate that a greater number of the participants, 253 (91%), agreed that patrons acquired important skills during information literacy training. This indicates that IL training is an effective means of imparting library patrons with important skills. A study by Moyi and Muya (2017) supports this finding when they opined that information literacy was a key program that was required by all academic libraries. This was because of its ability to equip library users with abilities and skills key to accessing and using relevant information effectively.

Further findings from table 4.4 also shows that the majority of the participants, 231 (83.1%), agreed that a better understanding of the library is acquired when information literacy programmes are well implemented. This indicates that information literacy is perceived positively because of the benefits users get after being taken through the programmes. These findings are in tandem with those of a study by Karm et al. (2021), who established that

young people in TTIs considered ILPs to have a positive effect on their ability to access information services.

In regards to improvement of user attitude, the results show that most of the respondents, 221 (79.5%), agreed that ILPs are improving the attitude of library patrons toward using library resources. This suggests that patrons' perceptions of ILPs as an instrument for allowing them to use library resources have changed. These results align with the research by Nikou et al. (2018) and Nikou et al. (2019), which found that customers' attitudes toward using library resources were considerably improved by their perception of information literacy.

Furthermore, respondents were asked if the skills acquired during information literacy sessions allow the users to maximize the use of the library. The findings indicate that the majority of the participants, 209 (75.2%), agreed that the skills acquired during information literacy sessions allow the users to better use the library and its resources. This indicates that users positively perceive IL sessions, given that they consider them to enable them to acquire skills that make it better for them to utilize the library. Karim et al. (2021) established that patrons' judgment of information sources, as a result of IL, greatly influences their ability to obtain and make use of information.

In order to determine the **Patrons** Appreciate Library Services after IL Training, respondents were asked if patrons appreciated various services provided by the library after being taken through information literacy programmes. The findings reveal that the majority of the participants, 240 (86.3%), agreed that library patrons get to appreciate the various services provided by the library after being taken through IL programs. This indicates that the patrons perceive information literacy as important in making them appreciate the various services

provided by the library. This is supported by Karim et al. (2021), who established that services provided by the library were increasingly sought by patrons after undertaking information literacy training since they had become aware of their availability and benefits.

In the interview sessions, the librarians were asked to describe the patrons' perceptions with regard to the information literacy programmes being provided in the library. A particular librarian (L1) stated that "*the library patrons seem to be appreciative of it because they show up in large numbers and are inquisitive in their interactions during the sessions*". Another librarian (L2) said that "*the information literacy sessions are very interactive and practical, hence are liked by the users as they become familiar with the library services and information sources available*" and another librarian (L3) indicated that "*the reception of patrons in regards to information literacy has been positive so far, going by the attendance and questions asked*".

#### **4.7 Major Challenges Associated with the Implementation of Information Literacy Programmes**

A Likert scale was used in a series of statements to elicit responses in relation to the major challenges associated with the implementation of information literacy programmes. The respondents were asked to indicate the Major Challenges Associated with the Implementation of Information Literacy Programmes (ILPs)

**Table 4.5: Major Challenges Associated with the Implementation of Information Literacy Programmes (ILPs)**

Statement	Strongly Agree	%	Agree	%	Not Sure	%	Disagree	%	Strongly Disagree	%
The library is not receiving sufficient support to enable it to implement ILPs.	18	6.5	231	83.1	7	2.5	11	4	11	4
The library staff has work overload, hence not being able to implement information literacy programs.	5	1.8	192	69.1	13	4.7	28	10.1	40	14.4
Library users have a poor perception of the library.	25	9	240	86.3	2	0.7	6	2.2	5	1.8
Lecturers were not referring students to the library as part of their teaching, hence not seeing the need to use library resources.	10	3.6	253	91	4	1.4	6	2.2	5	1.8
There is a lack of collaboration between librarians and lecturers in providing ILPs.	18	6.5	231	83.1	7	2.5	11	4	11	4

**Source: Researcher (2022)**

In terms of library was receiving sufficient support to enable it to implement Information Literacy Programmes (ILPs). The findings from Table 4.5 show that 231 (83.1%) agreed, 18 (6.5%) strongly agreed, 11 (4%) disagreed, 11 (4%) strongly disagreed, and 2.5% were not sure.

The findings reveal that the majority of the respondents, 231 (83.1%), agreed that the library failed to receive sufficient support from the stakeholders to enable them to effectively

implement ILPs. This indicates that the implementation of literacy programmes was negatively affected by a lack of sufficient support. This finding is in tandem with the study by Varlejs and Stecs (2014), which found a lack of support for information literacy programs as a challenge affecting their implementation and sustainability.

In regard to experiencing work overload hence not being able to implement information literacy programs (ILPs). The results from table 4.5 indicate that the majority of the participants 192 (69.1%) agreed that the library staff were struggling with work overload hence were not being able to effectively implement ILPs. This indicates that ILPs were suffering from the many other services being provided by library staff as most of their time and energy was being spent in delivering such services.

Furthermore on library users have a poor perception of the library. The result from table 4.5 show that the majority of the participants, 240 (86.3%), agreed that library users had a poor perception of the library. These findings indicated that the library was poorly perceived by patrons. This is supported by Namugera (2018), who established that students in TTIs lack awareness in relation to services and resources provided in their libraries, hence making them have negative perceptions about the library and not consider visiting the library.

In regard to referrals by lectures, the respondents were asked if the lecturers were not referring students to the library as part of their teaching, hence not seeing a need to use library resources. The findings show that 253 (91%) agreed, 10 (3.6%) strongly agreed, 6 (2.2%) disagreed, 5 (1.8%) strongly disagreed, and 4 (1.4%) were not sure. The responses are captured in Table 4.5.

The results reveal that the majority of the participants, 253 (91%), agreed that the lecturers were not referring students to the library as part of teaching, hence not seeing a need to use library resources. This reveals that teachers were not supporting the utilization of library services. This was because they were not directing students to access relevant resources in the library as part of the library marketing strategy. This finding tallies with that of Obinyan and Udem (2018), who noted that the biggest challenge to implementing information literacy was the lack of utilization of library services, which was partly occasioned by lecturers not referring students to library resources as part of their course study.

In terms of lack of collaboration between librarians and lecturers in providing information literacy programmes (ILPs) as a major challenge. The findings show that 231 (83.1%) had agreed, 18 (6.5%) had strongly agreed, 11 (4%) had disagreed, 11 (4%) had strongly disagreed, and 7 (2.5%) were not sure. The findings show that the majority of participants 231 (83.1%) agreed that there is a lack of collaboration between librarians and lecturers in providing ILPs. This clearly indicates that a lack of collaboration between librarians and lecturers was hindering the implementation of ILPs. According to Obinyan and Udem (2018), accomplishing the task of providing information literacy (IL) cannot be left to librarians alone. This requires the collaborative efforts of both lecturers and librarians. This, however, is not the case, as each is not so concerned with what the other is doing, hence hampering the effective provision of IL.

In the interview sessions, the librarians were asked to describe some of the challenges they experienced in the implementation of ILPs. A certain librarian (L1) added that “*our library is facing a lot of implementation issues relating to information literacy. Owing to the numbers being registered for library orientation, there is a need to redirect more manpower*

*towards the realization of effective information literacy programmes”* Another one (L2) said that *“there are a lot of financial constraints that are affecting the provision of information literacy programs. Funds are required to purchase the required IT infrastructure that can be used in implementing these programmes”*. Another librarian (L3) was of the view that *“information literacy programmes, cannot be provided solely by librarians. Its implementation requires bringing on board others, like lecturers, to direct students to use library resources and also to sensitize patrons on the availability of such resources”*.

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

In this chapter, the main research findings are summarized in accordance with the study's objectives, concluding observations are given, and policy recommendations, including potential areas for additional research, have also been provided.

#### **5.2 Summary of the Major Findings**

##### **5.2.1 Implementation Strategies of Information Literacy Programmes**

The research established that libraries have some form of information literacy programmes (ILPs) in place. The TTI libraries had instituted several programmes that were currently running. These include taking students through library orientation and monthly user education programs. The respondents admitted that the students undergo library orientations at the beginning of their courses. The findings showed that TTIs were conducting library orientation for students to help them be familiar with the library and its services. User-education is provided by the library. Library patrons are provided with library tours to help them learn how the library is organized, its collections, and the services offered. The research results showed that librarians offered individualized instruction on how to use library resources. In order to encourage lifelong independent learners, the library was also hosting courses on search techniques.

### **5.2.2 Frequency of Reviewing Information Literacy Programmes**

The study established that the ILPs were reviewed after every orientation using a feedback form. The findings indicated that the IL programs were not being reviewed to meet the needs of the users. The findings showed that students were not receiving an online link on a monthly basis for assessing information literacy programmes. Also, it was revealed that the libraries were not keen on finding out how helpful user education was to their users. The results showed that library patrons could not at any time provide information regarding the suitability of their ILPs and the libraries reviewed their ILPs based on the users they were training.

### **5.2.3 Users' Perceptions of the Implemented Information Literacy Programmes**

The study confirmed that ILPs are platforms for marketing libraries, their resources, and their services. The findings indicated that important skills are acquired by library patrons during IL training and that a better understanding of the library is acquired by users when IL programmes are well implemented. The findings revealed that information literacy programmes are improving the attitude of library patrons toward using library resources, and the skills acquired during IL sessions allow the users to make excellent use of library resources and services. Library patrons get to appreciate the various library services after being taken through IL programmes.

#### **5.2.4 Major Challenges Associated with the Implementation of Information Literacy Programmes**

The findings revealed that libraries were not receiving sufficient support from stakeholders to enable them to effectively implement ILPs. The results also demonstrated that the library staff is overworked and unable to execute information literacy programs. The research findings revealed that library users have a poor perception of libraries; the lecturers were also not referring students to the library as part of teaching, hence not seeing a need to use library resources. This shows that there is a need for all stakeholders to embrace collaboration in providing information literacy programmes.

#### **5.3 Conclusions**

It was established that the TTI libraries were implementing various forms of information literacy strategies. The TTI libraries had instituted several programs that were currently running. These include taking students through library orientation and monthly user education programs. Others included familiarizing the users through library tours, personal training on resources, and conducting search strategy sessions. If these programmes are well utilized, technical training institutions will be able to equip researchers and learners with relevant skills for research and innovation.

The study established that the ILPs are reviewed after every orientation using feedback forms. The IL reviews were being done to meet diverse user needs. However, other forms of reviews, such as the use of online links and post-user education feedback, were not considered. The review, however, was based on the IL training it provided to its users. TTIs

need to put in more effort and include the use of online links and post-user education feedback, among other ILP reviewing methods, to ensure they meet the diverse needs of their users.

The study concluded that ILPs are good for creating awareness about library resources and services. The study established that users acquire important skills during IL training sessions. The users therefore perceive information literacy programmes to be necessary in providing a better understanding to them and therefore advocating for their implementation. The study concluded that information literacy programmes are improving the attitude of library patrons toward using library resources. This is because the skills acquired during information literacy sessions allow the users to make use of the library. This has made most library patrons appreciate the various services offered by the library after being taken through ILPs. Therefore, libraries should continue offering IL to improve their user perceptions and also attract more users to their libraries.

The findings led to the conclusion that libraries were experiencing a number of setbacks as they implemented ILPs. These bottlenecks include: not receiving sufficient support to enable them to implement IL programs; the library staff having a lot of work, hence not being able to effectively implement information literacy programmes; the library users having a poor perception of the library; lecturers not referring students to the library as part of teaching, hence not being able to find a use for the available library resources; and a lack of collaboration between librarians and lecturers in providing ILPs. For ILPs to be effective, all stakeholders must be brought on board.

The management should provide adequate funding to support the programs as well as provide a conducive environment for collaboration between the librarians and the teaching staff so as to share ideas and experience in identifying the existing gaps in the implementation of ILPs and how to fill the gaps to provide sustainable library services to their users.

#### **5.4 Recommendations**

The researcher felt it was important to offer the following pertinent advice in line with the findings of this investigation:

##### **5.4.1 Policy Recommendations**

- i. Technical Training Institution (TTI) libraries need to identify various information literacy programmes that can work for them and customize them according to their user needs. The different information literacy programmes appeal to different library users and, hence, will manage to capture the varying needs of various users. This can be achieved through the evaluation of the currently available information literacy programmes to identify where they are falling short and ways of improving them so that they can have a big impact.
- ii. The user needs are dynamic and keep changing with time. This therefore means that ILPs cannot be implemented the same way they have been implemented in the past. The libraries in TTIs need to adopt ways of continuously evaluating the impact of the information literacy programmes so as to do away with those that are not impactful and adopt those that are effective. Also, to continue making better the information literacy programmes that are effective to make them have a bigger and longer impact on their users.

- iii. The TTI libraries need to focus more on the users than on the service when implementing information literacy programmes. By being more user-centered, the information literacy programmes will end up being more appealing to the users and be able to have a lot of impact on the them.
- iv. Cooperation and collaboration is required if the information literacy programmes are to be properly implemented. All stakeholders; librarians, lecturers, administrators and students need to cooperate with each other and at times collaborate in the implementation of ILPs. Cooperation among different players will bring them together and make them own the process of developing and implementing IL programs.

#### **5.4.2 Recommendations for Further Research**

This study focused on the management of information literacy programmes in selected TTI libraries in Nairobi County, Kenya. The researcher recommends that:

- i. A sustainable information literacy training tool should be developed within institutions to easily identify the specific needs of patrons so as to directly provide content that matches those unique user needs in relation to information literacy.
- ii. A comparative study be undertaken to project the overall management of information literacy programmes within specific universities and technical training institutions.

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**APPENDICES**  
**APPENDIX I: INTRODUCTORY LETTER TO PARTICIPANTS**

Dear Respondent,

My name is Vannah Nyakerario Mogere, I am a master's student in the Department of Library and Information Science at Kenyatta University. I am currently conducting research on "**Management of Information Literacy Programmes in Selected Technical Training Institution Libraries in Nairobi County, Kenya**" as part of the requirements for the completion of this degree program.

I am hereby requesting your assistance in completing the attached questionnaire, which will provide the necessary information required for this study.

The information you provide will be used for the study only and will be treated with confidentiality. It will be beneficial to the researcher as well as the mentioned academic libraries.

**Kindly indicate your consent to participate below.**

Agree            [   ]            Disagree        [   ]

Signed .....

Your cooperation will be highly appreciated. Thank you in advance.

Sincerely,

Vannah Mogere  
For further information, you may contact me at  
Tel: 0728667667  
Email: vannah9015@gmail.com

**APPENDIX II: RESEARCH QUESTIONNAIRE FOR THE TEACHING STAFF  
AND STUDENTS**

**SECTION A: BIO DATA (tick as applicable)**

1. State your highest level of education.

- Certificate            Diploma        
 Bachelors            Masters            PhD

**SECTION B: THE IMPLEMENTATION STRATEGIES OF INFORMATION LITERACY PROGRAMMES**

Please rate the Implementation Strategies of Information Literacy Programmes in place on a scale of 1-5, where 1 = Strongly Agree, 2 = Agree, 3 = Not Sure, 4 = Disagree, and 5 = Strongly Disagree.

		<b>The Implementation Strategies of Information Literacy Programmes</b>				
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1.	The library has some form of information literacy programmes in place.					
2.	Students undergo library orientation at the beginning of their course.					
3.	User education is provided by the library.					
4.	Library patrons are provided with library tours to help them become familiar with the library resources and services.					
5.	Library staff provide personalized training on the use of library resources.					
6.	The library has been conducting sessions on search strategies.					

**SECTION C: THE FREQUENCY OF REVIEWING INFORMATION LITERACY PROGRAMMES**

Please rate the frequency of reviewing information literacy programmes on a scale of 1-5, where 1 = Strongly Agree, 2 = Agree, 3 = Not Sure, 4 = Disagree, and 5 = Strongly Disagree.

<b>The Frequency of Reviewing Information Literacy Programmes</b>						
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1.	The ILPs are reviewed after every orientation process using a feedback form.					
2.	Every semester, the ILPs are reviewed to meet the needs of the users.					
3.	Every month, students received an online link used for assessing information literacy programmes.					
4.	At the end of the user education, the library was keen on finding out if it was helpful.					
5.	Library patrons could at any time provide information regarding the suitability of its information literacy programmes.					
6.	The library reviews the ILPs based on the users' training.					

**SECTION D: USERS' PERCEPTIONS OF THE IMPLEMENTED INFORMATION LITERACY PROGRAMMES**

Please rate the perception of Information Literacy Programmes on a scale of 1-5, where 1 = Strongly Agree, 2 = Agree, 3 = Not Sure, 4 = Disagree, and 5 = Strongly Disagree.

<b>Perceptions of the Implemented Information Literacy Programmes</b>						
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1.	Information literacy programmes are a channel for creating awareness of library resources and services.					
2.	Important skills were acquired during IL training.					

3.	Users better understand the library when ILPs are well implemented.					
4.	Information literacy programmes are improving the attitude of library patrons toward using library resources.					
5.	The skills acquired during information literacy sessions allow users to make better use of the library.					
6.	The library patrons get to appreciate the various services provided by the library after being taken through information literacy programmes					

**SECTION E: THE MAJOR CHALLENGES ASSOCIATED WITH THE IMPLEMENTATION OF INFORMATION LITERACY PROGRAMMES**

Please rate the Major Challenges faced in Implementation of Information Literacy Programmes on a scale of 1-5, where 1 = Strongly Agree, 2 = Agree, 3 = Not Sure, 4 = Disagree, and 5 = Strongly Disagree.

<b>Major Challenges in the Implementation of Information Literacy Programmes</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1.	The library is not receiving sufficient support to enable it to implement ILPs.					
2.	The library staff has work overload, hence not being able to implement ILPs.					
3.	Library users have a poor perception of the library.					
4.	Lecturers were not referring students to the library as part of teaching, hence not seeing the need to use library resources.					
5.	There is a lack of collaboration between librarians and lecturers in providing information literacy programmes.					

## **APPENDIX III: INTERVIEW SCHEDULE FOR THE LIBRARIANS**

### **Section A: Strategies for Implementing Information Literacy Programmes**

1. How would you describe the form of ILPs in place within the library?
2. How prepared is the library in terms of orienting students?
3. What other forms of ILPs are offered in the library?

### **Section B: Frequency of Reviewing Information Literacy Programmes**

1. How would you describe the way the ILPs are reviewed?
2. How often are the ILPs reviewed?

### **Section C: Users' Perceptions of the Implemented Information Literacy Programmes**

1. How would you describe the patron's perception in regard to the information literacy programmes being provided in the library?

### **Section D: Major Challenges in Implementing Information Literacy Programmes**

1. What are some of the challenges the library is facing in implementing information literacy programmes?

### **Section E: The Sustainability of Library Services**

1. What impact does the Information Literacy Programmes have in regards to sustaining library services?

## APPENDIX IV: UNIVERSITY RESEARCH AUTHORIZATION



KENYATTA UNIVERSITY  
GRADUATE SCHOOL

E-mail: [dean-graduate@ku.ac.ke](mailto:dean-graduate@ku.ac.ke)  
Website: [www.ku.ac.ke](http://www.ku.ac.ke)

P.O. Box 43844, 00100  
NAIROBI, KENYA  
Tel. 8710901 Ext. 57530

Our Ref: E65/OL/CTY/26332/2015

DATE: 10<sup>th</sup> January, 2022

Director General,  
National Commission for Science, Technology  
and Innovation  
P.O. Box 30623-00100  
NAIROBI

Dear Sir/Madam,

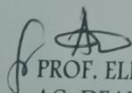
RE: RESEARCH AUTHORIZATION FOR MOGERE NYAKERARIO VENNAH – REG. NO. E65/OL/CTY/26332/2015.

I write to introduce Mogere Nyakerario Vennah who is a Postgraduate Student of this University. The student is registered for MLIS degree programme in the Department of Library and Information Science.

Vennah intends to conduct research for a MLIS Project Proposal entitled, "Management of Information Literacy Programmes in Selected Technical Training Institution Libraries in Nairobi County, Kenya."


Any assistance given will be highly appreciated.

Yours faithfully,


  
PROF. ELISHIBA KIMANI  
AG. DEAN, GRADUATE SCHOOL

EM/mo

**APPENDIX V: RESEARCH PERMIT**




REPUBLIC OF KENYA



**NATIONAL COMMISSION FOR  
SCIENCE, TECHNOLOGY & INNOVATION**


**RESEARCH LICENSE**



**This is to Certify that Ms. VENNAR Nyakaru MOGERE of Kenyatta University, has been licensed to conduct research in Nairobi on the topic: MANAGEMENT OF INFORMATION LITERACY PROGRAMMES IN SELECTED TECHNICAL TRAINING INSTITUTION LIBRARIES IN NAIROBI COUNTY, KENYA for the period ending : 24 January 2023.**


**License No: NACOSTIP/22/13497**

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