EDUCATION

INFORMATION LITERACY PRACTICES AS A TOOL FOR ACCESSING AND UTILIZING INFORMATION IN SECONDARY SCHOOLS IN KENYA

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ABSTRACT

Background of the study: Information literacy practices have been recognized as essential educational goals to judge and evaluate student's aptitude for critical thinking, decision making and problem-solving. Inculcating information literacy skills to students is not only significant to survival but also enables them to know when they need information, how to locate information and how to use information hence success in their studies. However, the state of information literacy practices in secondary schools in Kenya has not been adequately investigated to determine their degree of effectiveness.

Objective of the study: Consequently, this study aimed at investigating information literacy practices as a tool for accessing and utilizing information in secondary schools in Kenya.

Methodology: The study was based on a pragmatic paradigm where both quantitative and qualitative approaches were adopted. Data was collected from a targeted population which consisted of 288 teachers, 12 school/teacher librarians and 1785 students from 12 sampled schools. Questionnaires were administered to teachers and students while an interview schedule guide was used to gather data from–school/teacher librarians. Data was analyzed using descriptive statistics, and presented in form of tables, charts and graphs and verbatim reports. The study was important as it elicited discussions that could be used for purposes of adoption of an information literacy programme in secondary schools.

Results and findings: The findings show that some information literacy practices were available in secondary schools but not effectively practiced resulting to students proceeding to institutions of higher learning without adequate information literacy skills.

Conclusions and recommendations: The study concludes that information literacy is a prerequisite tool for accessing and using information in secondary schools. Information literacy skills enables students to conduct independent information search, efficiently retrieve information using modern technologies, critically evaluate their findings and effectively apply relevant information into their day to day situations. Therefore, the incorporation of information literacy practices into secondary schools' curriculum would institutionalize information literacy in secondary schools.

Keywords: *Accessing, Information literacy, Information Literacy Practices, Secondary Schools, Utilizing*

1.1 INTRODUCTION

Generally, information is considered to be of significance to every facet of life. It is of value in social development, economic growth, political enlightenment, technological progress, knowledge advancement and informed decision making process. Therefore, access to information is essential as it allows individuals to seek, receive and impart information effectively. However, the world is engulfed in an enormous amount of information raising questions about its authenticity, validity, and reliability (Togia, Korobili, Malliari, & Nitsos, 2015). Thus information users are confronted with avalanche of information from different kinds of sources making it difficult to verify their authenticity (Mudave, 2016).

There is a strong need for information users in secondary schools to be able to identify what is relevant for their use as exposure to too much information may be counterproductive as a result of information overload (Yeboah, Dadzie, & Owusu-Ansah, 2017). The information environment has become complex and is constantly changing due to technological developments that have made access and retrieval of information become complex. The changes have made information literacy (IL) to be recognized as the critical tool for the 21st century (Adeyemi, 2017). Secondary school students should be information literate for them to succeed in their academic endeavours. IL is considered as a tool to individual empowerment and community development. Therefore, it is important to equip information users with IL skills, specifically secondary school students who are the focus of this study to help them know when they need information, access, evaluate and use it ethically and morally in the construction of individual knowledge for immediate and lifelong learning.

Contexts in which people use IL skills may vary from one user group to another. Stakeholders of an education system of a country among them information professionals, teachers, curriculum developers, parents, students and researchers all need to understand the role of IL in the lives of teachers and learners. Students need IL skills to help them supplement classroom learning with information that they can access and use appropriately. It may be unclear to some of the

stakeholders about the manner in which information users in secondary schools navigate through the deluge of information in order to achieve their goals. Despite the acknowledgement that IL skills are necessary for learning, there is lack of a clear explanation on how this can be achieved in formal education (Meghann, 2015). People may experience a range of information related problems including the use of low quality information, information overload and inability to find the needed information if they lack the necessary skills to search, locate, process, evaluate and use information (Anyaoku, Anunobi & Eze, 2015). In view of the importance of IL skills in accessing and utilizing information this research therefore investigated information literacy practices as a tool for accessing and utilizing information in public secondary schools in Nakuru County, Kenya.

1.2 STATEMENT OF THE PROBLEM

Information literacy is essential for information users in secondary schools especially in the knowledge economy as it equips them with skills to know when and where to locate information. The significance of information literacy in school has been recognised by scholars (Adeyemi, 2017; Zulkifpeli, Yu, & Ismail, 2016; Malliari, Togia, Korobili, & Nitsos, 2014) who contend that information literacy is of value to every aspect of a human being and a prerequisite in the learning process at all levels. Information literacy skills are important for secondary school students for successful learning in an information-rich future. However, research shows that majority of students graduate from secondary schools without adequate IL skills to enable them be independent learners in their academic endeavours (Varlejs, Stec, & Kwon, 2014; Raish & Rimland, 2016; Saunders, Severyn, & Caron, 2017). Additionally, students' information literacy skills have been found to be weak in specific areas including inability to use Boolean operators, organize literature and identifying appropriate sources of scientific literature (Michalak, & Rysavy, 2016; Maurer, Schlögl, & Dreisiebner, 2016).

The Government of Kenya has established various Education Commissions to evaluate the education systems and propose recommendations whose applications were expected to bring improvements in the education system (Gikungu, Karanja & Thinguri, 2014). The Commissions' reports are the result of the different systems of education that have been undertaken in Kenya. Curriculums were developed as a result of these commissions' recommendations. Notably, none of the Commissions' recommendations addressed information literacy as a requirement for learning. Similarly, Competency Based Curriculum and Sessional Paper No. 1 of 2019 on policy framework for reforming education and training do not address any information literacy issues for secondary school learners (Republic of Kenya, 2019). Therefore, information literacy has not been taken seriously in the secondary school education context especially in Kenya by the fact that IL is has not been considered as subject for study at this level. This is a clear demonstration of a gap with respect to information literacy practices for secondary school students, a gap the present research intended to fill.

1.3 RESEARCH OBJECTIVE

The research objective was to investigate information literacy practices as a tool for accessing and utilizing information in secondary schools in Kenya.

2.1 THEORETICAL FRAMEWORK

The study was guided by the Big6 Skills for Information Literacy which offers a simple, flexible and broadly applicable approach of learning and teaching essential IL skills. The model also befit this study as it is cognizant of the fact that students can develop IL skills independently rather than following a step by step or linear process therefore its design can promote teaching and development of IL skills among secondary school students in the school context. The Big6 skills helps in describing how people of all ages solve an information problem, the context under which secondary school students operate in. Eisenberg, Lowe and Berkowitz (2004) confirm that the model is applicable for any information related task for every age group and study level hence making it relevant to this study. The Big6 Skills for information literacy was developed by Mike Eisenberg and Bob Berkowitz in 1990, originally for use in secondary schools but it is presently being applied to all levels of education (Eisenberg, Lowe & Spitzer, 2004). It is a widely-used approach to teaching information and technology skills in the world particularly in higher education institutions, corporate and adult training programmes. Some people refer to the Big6 as an information problem-solving strategy because with it people are able to handle any problem, assignment or task. The Big6 model is appropriate when people need and use information as it integrates information search and use skills along with technology tools in a systematic process to find, use, apply, and evaluate information for specific needs and tasks.

The Big6 Skills IL model consists of six stages with two sub stages under each. These six stages include: task definition, information seeking strategies, location and access, use of information, synthesis and evaluation (Deepak & Sarman, 2017). The six stages explain how people solve problems or make decisions by use of information. Secondary school students go through all the stages in solving academic problems although the stages might not follow each other systematically.

2.2 LITERATURE REVIEW

Information literacy is essential to the mission of all learning and teaching institutions. IL equips students with skills that enable them face the 21st century demands and challenges that surround the information economy (Adeyemi, 2017). Information literate students are better equipped for today's intricate information landscape and situation. This calls for serious consideration of IL practices in secondary schools to equip learners with the pre-requisite skills. Foo, Majid, and Chang, (2017) observe that the Ministry of Education in Singapore is cognizant of the necessity to develop a national IL programme across different grades and subjects in public schools. The

development of a national IL programme would ensure the integration of IL in the school curriculum hence would help students to acquire these requisite skills. Secondary school teachers execute what the curriculum entails therefore the inclusion of IL in the school curriculum would dictate that IL is taught as other subjects. Teaching IL to school children will help them deal with a number of information related issues such as information overload problems, use of information from the Internet, failure to evaluate and synthesize information, and neglect of non-digital sources of information.

Ngo, Pickard and Walton (2019) investigated the ways in which IL practices are outlined in Vietnams' upper secondary schools and found out that time pressure, teaching methods, resource issues, students awareness of IL and lack of support from family were challenges bedevilling the development of IL programmes. These factors negatively impact on the development of an IL teaching model for Vietnam's upper secondary schools. Developing an IL model and its integration in teaching students may assist in the inculcation of IL skills among students. There is need to equip students with IL skills for them to be able to make sense of the information they come across.

Lwehabura (2018) observes that regardless of the existence of IL among students they still demonstrate deficiencies in their IL knowledge and skills in key aspects. The author further notes that students experience challenges in searching for information from electronic sources and in application of various information search techniques including Boolean operators, use of truncation, synonyms and concept maps.

The author suggests for the introduction of IL course for both post and undergraduate students for the purpose of ensuring effective and independent learning process. The introduction of IL course at these levels of education would ensure that those who train as teachers for secondary schools would be equipped with IL skills and subsequently transfer the same skills to secondary school students.

Oluwaseye and Oyetola (2018) examined IL skills as determinant of social media use among private secondary school students in Nigeria. Findings showed that students have high level IL skills. IL prowess enables students to regularly use social media platforms such as Google+, Twitter, Face book, YouTube and Flicker. The platforms assist students to carryout tasks including uploading and viewing pictures and photographs, locating information on politics and national development and also for chatting. On the other hand, the use of social media platforms has contributed to divert students from their school educational activities and encouraged cyber-bullying. It is an obligation of Library and Information Science (LIS) professionals to advocate for embracing of IL skills which stipulates ethical use of information and the utilization of social media platforms for academic pursuits.

Malliari et al. (2014) investigated IL skills of Greek high school students and found out that students were conversant with the use of the Internet in satisfying their personal needs. However, the authors observe that students have challenges in locating and evaluating information for their

school assignments. There is need to integrate IL programme into secondary school education to ensure that students are equipped with IL skills. Jabeen et al., (2016) investigated information literacy in China's university and research libraries and found out that university libraries were doing better than research libraries. The authors observe that library orientation, library tours and introductory information skills were the methods used in training IL skills in both libraries. In addition, the authors observe that there is integration of IL programmes in some subject units. The authors further note that IL programmes were being implemented in university libraries contrary to the case in research libraries. There seems to be differences in the implementation of IL programmes in university and research libraries in China. The antidote of these differences is the formulation of a national IL policy that may compel libraries to universally adopt IL programmes.

Yu, Abrizah, Rafedzi and Abdullah (2018) investigated how a resource-based school history project in Malaysian secondary schools contributed to the development of IL skills. The authors note that although the project was highly structured it was considered to be a research project by teachers and students. It was a quick means of gathering and compiling information for a task(s) at hand. The authors further observe that teaching approaches used by teachers were geared towards subject content and project instruction fulfilment. In addition, the authors observe that a subject focused project neglects the development of IL skills, learning skills, and research and report writing. Project based learning approach does not guarantee the development of IL skills. The low IL development amongst students may be attributed to inadequate direction from teachers and not embedding IL models in the instructional methods.

Similarly, Baji, Bigdeli, Parsa and Haeusler (2018) examined the integration of IL skills instruction in Iranian primary school curriculum. The study used the 6th grade science students whereby an experimental group received IL instruction and the control group received traditional text and lecture based instruction. The authors found out that the experimental group demonstrated greater improvement in their performance than the control group. The authors further note that students need IL instructions to improve on the use of information and synthesis of information. The authors recommend for the integration of IL instruction into the education programme. Integration of IL would ensure that teachers, librarians and curriculum developers work together thus reinforcing the importance of the library and would result to worthy learning outcomes. The remedy for creating an information literate school community is the embedment of IL instructions into the school education programme.

Kanyengo and Kamau (2020) investigated the existence of IL policies guiding the implementation of IL programmes and practices available in the delivery of IL training in medical and health libraries in Kenya. The authors note that only a small percentage (40%) of libraries have policies guiding implementation of IL programmes while others (60%) did have policies although they observed some IL aspects. The authors further observe that there is a difference in IL training for academic and research, special and hospital libraries. Formulation of relevant policies governing implementation of IL practices in libraries would contribute to the

development of IL skills among library patrons. Managing of information resource centres by LIS professionals would bring about uniformity in inculcating IL skills to users.

Similarly, Pinto, Garcia-Marco, Ponjuán, and Sales, (2019) analysed the state of policies and plans on IL in Ibero-America and found out that IL planning landscape has been dealt with to some extent since the national policies cover the general and abstracts aspects. For example, there was some visibility of IL in the institutional strategic plans and its deployment through specific programmes and actions. The authors note that a ~~good~~ number of institutions had effected systematic programmes while a few were piloting projects of transiting from the traditional users training. The inclusion of IL in the national policies would invoke for its deployment in all institutions of learning hence would facilitate its learning.

Were (2019) examined the effectiveness of IL programmes at Tangaza University College Library and found out that teaching IL as a curricular course was the predominant practice used in the delivery of IL programme at institutions of higher learning. The author also notes that other IL practices including library orientation, user education and seminars were observed in institutions of higher learning. Institutions have made IL programme mandatory and teaching it as a curricular course is more preferred than any other method. This may be attributed to the fact that learners are likely to concentrate more on curricular courses than in non-curricular matters. Focus group, self-assessment tests, classroom assignments and classroom work portfolio were noted to be the best methods of evaluating IL programme as compared to case studies, performance appraisals, oral tests and satisfaction surveys. Evaluating learners in whatever they have learned is the best way of achieving the desired objectives of a learning process. Teaching IL practices in a curricular is the best way of inculcating IL skills among students. Teaching may be made possible in case IL practices are embedded in the education curriculum of learners regardless of their learning level.

Emisiko and Severina (2018) examined effects of IL practices on lifelong learning for students in higher learning institutions in Kenya. The authors note that IL practices including IL training, library orientation and integration of IL in the core curriculum contributes positively to lifelong learning tendencies of undergraduate students. This may be attributed to the fact that IL practices assist in equipping students with relevant skills which they use for the rest of their life while pursuing studies and in the job market. Therefore, higher learning institutions should be encouraged to include IL practices in their academic programmes to bequeath students with IL skills.

Demasson, Partridge, and Bruce, (2019) examined how public librarians constitute IL and found out that it is organized in four ways; intellectual process, technical skills, navigating the social world and gaining desired results. Public libraries are entrusted with offering of services and programmes that support information needs of community members. Public libraries are integral entities of the society therefore endeavours need to be made to ensure that they design and deliver IL programmes that will support the inculcation of IL skills among their users. The development of IL programmes in public libraries may contribute to the adoption of IL practices

hence learning of IL skills among secondary school students. Flierl and Maybee (2020) examined two IL theories: critical information literacy and informed learning and found out that the theories are inclined towards a 20th century European worldview. The authors further observe that good IL educational practice needs active commitment with IL theory in order to direct what educators teaching IL should do. It would also emphasize on the importance of integrating IL in higher education. This explains why this study adopted the Big6 model to guide teachers and students in teaching and learning IL because the model tenets present an active process in learning IL skills.

Julien, Gross and Latham (2018) surveyed IL instructional practices in the United States academic libraries and found out that instructional role was a librarian's responsibility. This was as results of students joining postsecondary educational contexts without the ability to independently search and evaluate information. The authors further note that the teaching role was complex and challenging since it has progressed over time from teaching students how to locate materials in the library to broader goals including instructions on critical thinking and information evaluation skills. Additionally, Ukpebor and Emojorho (2012) surveyed the transition of students from secondary schools to university education in Nigeria. The authors found out that students were not taught IL skills at secondary school level and as a result they were ill-equipped with IL skills. The inadequate IL skills hinder students from being able to identify, access and utilize information sources in their learning process. The authors note that students' understanding of search strategies for example Boolean operators was poor making it difficult for them to conduct successful searches for relevant information.

This is a clear revelation that secondary students transit to institutions of higher learning with challenges of not being independent information seekers whom they should be hence necessitating this research on IL practices as a tool for accessing and utilizing information in secondary schools.

Identified Research Gap

The significance of studying IL practices in secondary schools using students who are in their fourth year was based on the fact that they would soon be graduating from secondary schools and are expected to join institutions of higher learning where academic expectations are different from secondary school. Students are expected to work on their own more than they do in secondary school situation. The reviewed literature reveals that majority of the studies are concentrated in the developed countries context. Although there is growing crusading for IL in institutions of higher learning in Africa there is little effort for the same in secondary schools. There are also limited empirical studies on IL practices for accessing and utilizing information in secondary schools in the developing countries with specific reference to Kenya.

Therefore, this study makes a contribution in bridging these gaps and also contribute to the body of knowledge in regard to information literacy by giving students', teachers' and school

librarians' opinions in the African context. The study also avails information that policy makers may use in formulating national IL policies for secondary schools that may guide stakeholders in designing an IL programme to institutionalize IL in secondary school education programme.

3.1 RESEARCH METHODOLOGY

Research Design

This study used descriptive survey, due to its appropriateness in collecting data on opinions, attitudes and feelings of a population (Kothari, 2004; Creswell, 2003). Pickard (2013) also agrees that descriptive surveys are appropriate as information is collected without manipulating the variables under study. Descriptive survey allows researchers a wide scope of investigating many aspects of phenomena at the same time in their natural environment. The study employed mixed methods approach whereby the researcher combined quantitative and qualitative techniques.

By combining both quantitative and qualitative techniques it offered a better understanding of the research problem. It also helped in obtaining comprehensive data and generated confidence in the research findings and conclusions.

Study Area

The study was conducted in public secondary schools within Nakuru County, Kenya as it provided a suitable setting in which to gather views due to its nature of being both an urban and rural setting. Also, it has all the clusters of schools and the schools' population is cosmopolitan hence the resulted opinions can be reflective of the position in the country in regard to the variables under study.

Target Population

The study was conducted in 12 public secondary schools within Nakuru County. Secondary schools are grouped under four clusters namely; national, extra-county, county and sub-county; the categories each of the 12 identified schools belong to respectively. The target population for this study was 288 teachers, 12 school/teacher librarians and 1785 students.

Sample and the Sampling Techniques

The study employed both probability and non-probability sampling for the various types of different population categories. Schools were purposively sampled based on their type to ensure that all types of schools are represented. Similarly, school/teacher librarians were purposively sampled as key informants. It was believed that the subjects had the required information with respect to the objective of the study. This yielded to a sample size of 12 school/teacher librarians. This is in agreement with Kothari (2004) assertion that purposive sampling does not need any condition for estimating the probability of each item in the population being included in the sample. Purposive sampling technique permits researchers to use cases that have the requisite

information with respect to the objectives of a study. Simple random sampling was used to draw teacher and student respondents. Using the Krejcie and Morgan (1970) sample size table for small samples resulted to a sample size of 266 teachers and 1189 students.

Instruments of Data Collection

The main instruments used in the study were questionnaires and interview schedules. Questionnaires were administered to teachers and students while the interview schedule guide was for school/teacher librarians.

Questionnaire

Questionnaire was the primary technique for data gathering. The study used two sets of questionnaires. One set of questionnaire was administered to teachers while the second set was administered to students. The questionnaire had two broad sections; section one covered respondents' demographic details and section two covered the study objective. The questionnaire had both open ended and closed questions and some questions were on a Likert scale whereby respondents were required to indicate their responses.

Interview Schedule

The interview schedule was used as a secondary technique for gathering data. It was also designed to elicit further clarifications that the questionnaire may have left out. The study adopted semi-structured face-to-face interview with school/teacher librarians. The interview schedule had two sections: section one covered respondents' demographic details and section two covered the study objective.

Data Analysis

Data was analysed quantitatively and qualitatively to make deductions, interpretations, conclusions and possible recommendations. Creswell (2003) observes that in mixed methodology quantitative and qualitative data are analysed separately. Quantitative data was analysed using descriptive and inferential statistical techniques using Statistical Package for the Social Sciences Software version 22. The descriptive statistics assisted in indicating characteristics that were common to the entire sample and summarized data on a single variable. The analysed data was summarized into tables and diagrams.

On the other hand qualitative data was analysed thematically according to the theme of the study as derived from the objective and verbatim quotations were narratively presented.

4.1 RESULTS AND DISCUSSION

Out of the targeted respondents 1,180 students and 215 teachers participated in the research presenting a response rate of 99% and 81% respectively. While 12 interviews were conducted presenting 100% response rate. The overall response rate was 96%. The purpose of this study was to investigate IL practices as a tool for accessing and utilizing information in secondary schools in Kenya**.**

Availability of IL Practices in Secondary Schools

Teachers were asked to indicate the availability of the following IL practices: library hour, library orientation and library skills lesson in their schools on a scale of 1 to 5; strongly disagree, disagree, neutral, agree and strongly agree. The responses are illustrated in Table 1

Table 1: Availability of IL Practices in Secondary Schools (N =215)

IL Practices	Strongly Disagree(1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree(5)	Score	Mean
Library orientation	0	0	18	72	125	967	4.49
Library hour	0	24	36	53	102	878	4.08
Library skills lesson	135	58	22	0	0	317	1.47

Source: Primary Data

Results indicated that library orientation was noted as the most available IL practice in secondary schools with a mean score of 4.49, library hour 4.08 while library skills lesson 1.47 was noted to be the least available IL practice in secondary schools.

Notably, library orientation and library hour were indicated to be regular IL practices in secondary schools while library skills lesson seem to be neglected.

Aspects that Constitute IL Practices

School/teacher librarians were asked to state the aspects that constitute IL practices. Though some of them did not know the aspects that constitute IL, most of those who were interviewed elucidated IL to mean helping users understand how to use the library. Some of the specific responses included, library user instruction, user education and use of various library materials. Other aspects that constitute IL practices include library use in problem solving, use of

information in assignments, sorting and presenting information, searching and locating information and recognizing the role information plays. Table 2 presents a summary of the results.

Table 2: Aspects that Constitute IL Practices

IL Practice Aspects	Frequency	Percentage
Library user instruction	8	67
User education	8	67
Use of various library materials	7	58
Library use in problem solving	6	50
Use of information in assignments	6	50
Sorting and presenting information	5	42
Searching and locating information	4	33
Recognizing the role information plays	3	25

Source: Primary Data

Table 2 presents varying responses with regard to aspects that constitute IL practices. Eight (67%) of the school/teacher librarians stated that library user instruction and user education constitute IL practices. Seven (58%) of the respondents indicated use of various library materials as constituting IL practices while 6(50%) viewed library use in problem solving, and use of information in assignments as aspects of IL practices. The least considered as an aspect that constitute IL practices was recognizing the role information plays at 25%. The varying responses may be attributed to the school/teacher librarians' knowledge in the subject matter where some had undergone formal training while others had no training.

Assessing Utilization of Information Literacy Practices in Secondary Schools

Teachers were asked to assess the utilization of IL practices in secondary schools. The results are presented in Table 3.

Table 3: Assessment of Utilization of IL Practices in Secondary Schools

IL Practices	V. Poor	Poor	Average	Good	Excellent	Score	Mean
	(1)	(2)	(3)	(4)	(5)		Score
Library orientation	0	2	12	196	5	849	3.94
Library hour	0	14	184	17	0	648	3.01
Library skills lesson	96	104	15	0	0	349	1.62

Source: Primary Data

Table 3 shows that majority of the teachers assessed library orientation as the most prevalent utilized IL practice with a mean score of 3.94, followed by library hour 3.01 while library skills lesson utilization was assessed the least with a mean of 1.62. Findings of the assessment show that even though IL practices were in place, their practicability was minimal.

Although library orientation was noted to be the common practice in secondary schools it should be borne in mind that students are individuals meaning that IL level of each student in a group is different therefore individualised practices may be more beneficial to the learners.

Inclusion of Library time

Responding to the question on how the inclusion of library time in the school timetable would enhance IL practices. All the key respondents 12(100%) agreed that including library time in the school timetable would offer an opportunity for IL skills to be inculcated to students. Respondents suggested for the allocation of between 40 minutes to one hour per week in the school timetable. This implies that IL was seen as an important component in the academic programme for learners. Moreover, 4(33%) of the respondents observed that all secondary schools should establish libraries to allow equal learning opportunities for students.

Lib7 stated "*the school allocates only 40 minutes per week for library hour which is inadequate for learning IL skills."*

The absence of library time in the school programme means that students did not have an opportunity to visit school libraries. Through library visits students may have opportunities to learn library procedures including IL skills. Secondary school students operate on a regulated timetable hence it may not be possible for them to use the library if they are not scheduled.

Subjects Associated with Information Literacy

Teachers were asked to indicate whether the subject(s) they teach were associated with IL. The question was aimed at finding out if there were any subject(s) that enabled teachers to impart IL

skills to students. Majority 146(68%) of the respondents indicated that none of the subject(s) they taught was associated with IL, 54(25%) were not sure while 15(7%) indicated that the subjects they teach were related to IL. Those who indicated the subjects were associated with IL were language teachers who also acted as teacher librarians. This view was more specifically from English teachers and may be attributed to the subject being the official communication language in almost all the examinable subjects in secondary schools.

The findings revealed that there were no subjects taught in secondary schools that were associated with IL except in some instance where English subject was mentioned.

Additionally, teachers were asked to state whether the subject(s) they taught facilitated training students on the five listed IL aspects: identifying of a need for information, accessing information, evaluating information, using information and legitimate use of information. The responses are presented in Figure 1.
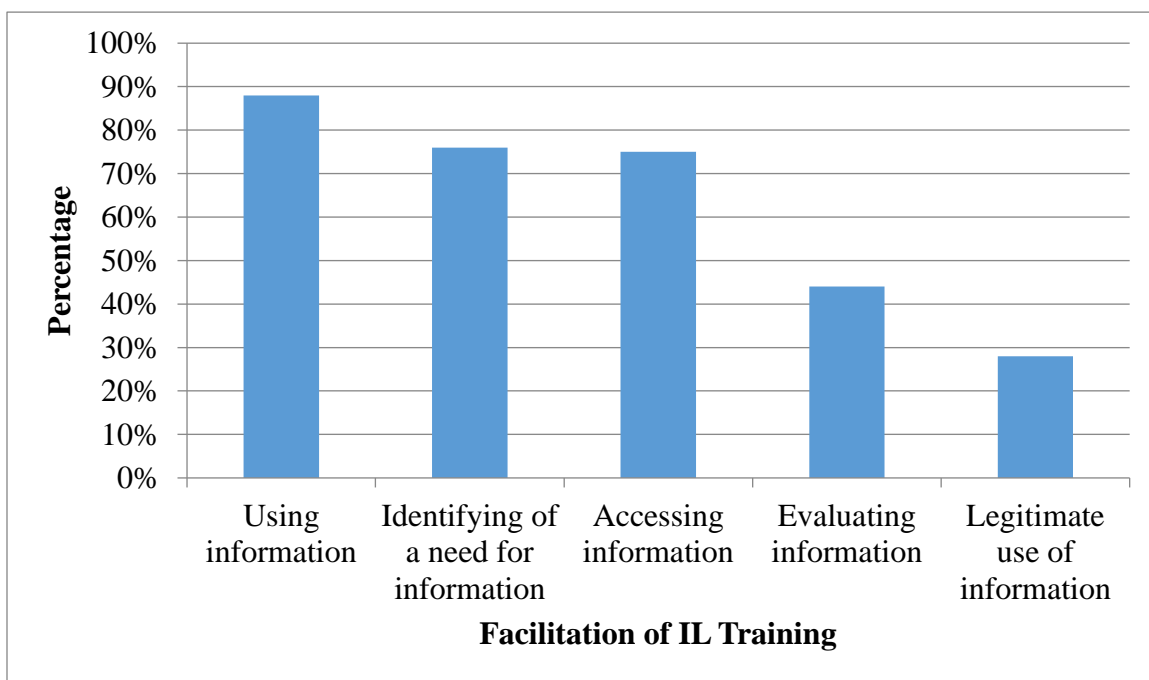
Source: Primary Data

Figure 1: Extent Subjects Facilitate IL Training

The respondents indicated in a decreasing order, of the aspects in which the subjects they teach enabled them to train students in IL: using information (88%), identifying of a need for information (76%), accessing information (75%), evaluating information (48%) and lastly legitimate use of information (28%). However, three teachers indicated that none of the subjects they teach enabled them to train students in any of the IL aspects. In the course of teaching,

students are given class assignments to perform on their own and are referred to some reference materials to search for and use from the school libraries/bookstores.

This exposes students to some IL skills including using information, identifying needs for information, and accessing information. Nevertheless, the experience may not adequately help students to learn IL skills because the driving force is to complete assignments.

On the other hand, students were asked to indicate whether there was any subject(s) they were taught that provided them with an opportunity to use the school library. Majority 684(58%) of the students agreed that all subjects required them to use the school libraries/book stores. This is because they need reading space and use textbooks which are in the library to do their assignments. IL skills are necessary for successful use of libraries/bookstores. The skills help students to save on time spent in searching for relevant information and facilitate their excelling in the academics. While 496(42%) indicated "**no**" indicating that regardless of the fact that all subjects required the use of a library they did not have a school library. Therefore, they borrow books from the school bookstores and carry out their assignments in class. Teachers may influence the use of the school library by giving students assignments that require them to use these facilities and through that students will enhance their IL skills.

Information Literacy Training in Secondary Schools

Teachers were asked to indicate whom they think should facilitate IL in secondary schools. Majority 116(54%) of the respondents indicated that teachers should facilitate IL training, 82(38%) specified that IL should be taught by both teachers and librarians, while 17(8%) indicated that librarians should teach IL in secondary schools. Respondents who indicated that teachers should facilitate IL training argued that teachers have pedagogical skills and therefore qualified to teach. They stated that English teachers were better placed in teaching IL skills as libraries are managed under the cohort of language subjects. They observed that teaching requires pedagogical skills and doubted the capability of librarians teaching IL effectively. Some respondents were of the opinion that teaching of IL should be a shared responsibility between teachers and librarians. This may be attributed to technical areas where librarians may have knowledge to guide students. On the other hand those who were of the opinion that IL teaching should be the librarians' responsibility argued that librarians are trained in LIS and therefore possess the requisite skills which they may apply in teaching IL skills to students.

A respondent from one of the schools observed that librarians are the custodians of information resources hence it should be their responsibility to teach IL in order to educate students on how to use information resources in the library. Another respondent was of the opinion that if teachers were to teach IL then they should be equipped with adequate knowledge in IL.

Library Tours

Students were asked whether they have ever been given an opportunity to tour the school library. The question was meant to establish whether or not there were any efforts made to equip students with IL skills. Majority 495(42%) of the students indicated that they infrequently toured the school library, 425(36%) respondents indicated that they have never had the opportunity to tour the school library and 260(22%) indicated that they fairly frequently tour the school library. Students who indicated that they infrequently toured the school library pointed out that they were oriented to the school library when they joined form one and that they visit the library on an irregular basis. Students who indicated to have never had an opportunity to tour the school library pointed out that their schools did not have established libraries but had rooms converted to bookstores. They claimed that the bookstores are small in size and poorly stocked hence cannot provide an opportunity for a tour. Those who stated to be given opportunities to tour the school library alluded to the fact that teachers give them assignments that compel them to visit the library to search for information materials that assist them in doing assignments.

Library role in Training IL Skills

In regard to if the library plays any role in equipping students with IL skills. Majority 566(48%) of the students indicated that the library does not play any role in equipping them IL skills, 378(32%) indicated that the library plays a little role and 236(20%) indicated that the library to some extent plays a role in equipping them with IL skills. Students who indicated that the library does not play any role in equipping them with IL skills argued that they were only informed of the existence of the library/bookstore within the school. Those who indicated that the library plays a little role claimed that librarians inducted them to the library when they joined form one. Students who indicated that the library plays a role to some extent in equipping them with IL skills observed that other than library orientation which they were inducted in form one, librarians help them to search for information in regard to their information needs whenever they visit the library. They further stated that they were introduced to basic aspects like library rules and regulations, procedures for borrowing books and how to locate books from the shelves.

Provision of any form of IL instruction to users

School/teacher librarians were asked to indicate if they offer any form of IL instruction to users. Six (50%) of the respondents indicated that they did not offer any IL instructions to users. Four (33%) respondents agreed that they offer IL instruction through library orientation to form one students in the first week of reporting, while 2(17%) indicated that they only issued books to library users. Notably from the respondents, two national and two extra county schools offered some IL instructions to form one students through library orientation. Respondents indicated that during orientation they instructed students on how to locate library materials from the shelves, how to search for information and how to use library resources for their academic tasks. This may be attributed to the fact that these schools have established libraries managed by trained librarians. Four extra and two county schools have established libraries. Some of the respondents

in these schools are trained teachers with no background in LIS subject but only assist in running of the libraries. While other respondents indicated that there was no time allocated for library instruction, students only visit the library to complete assignments or borrow materials, while others had no training in LIS hence did not have knowledge in IL. On the other hand, the two sub county schools did not have established libraries or qualified staff but use book stores where students only borrow information materials. The findings are an indication that some school librarians' prowess in IL was limited and did not view IL as a necessary skill for their users.

Ways of Enhancing Information Literacy Practices

Finally respondents were asked to suggest ways IL practices can be enhanced in secondary schools. Figure 2 presents the teachers' responses on the ways of enhancing IL practices in secondary schools.
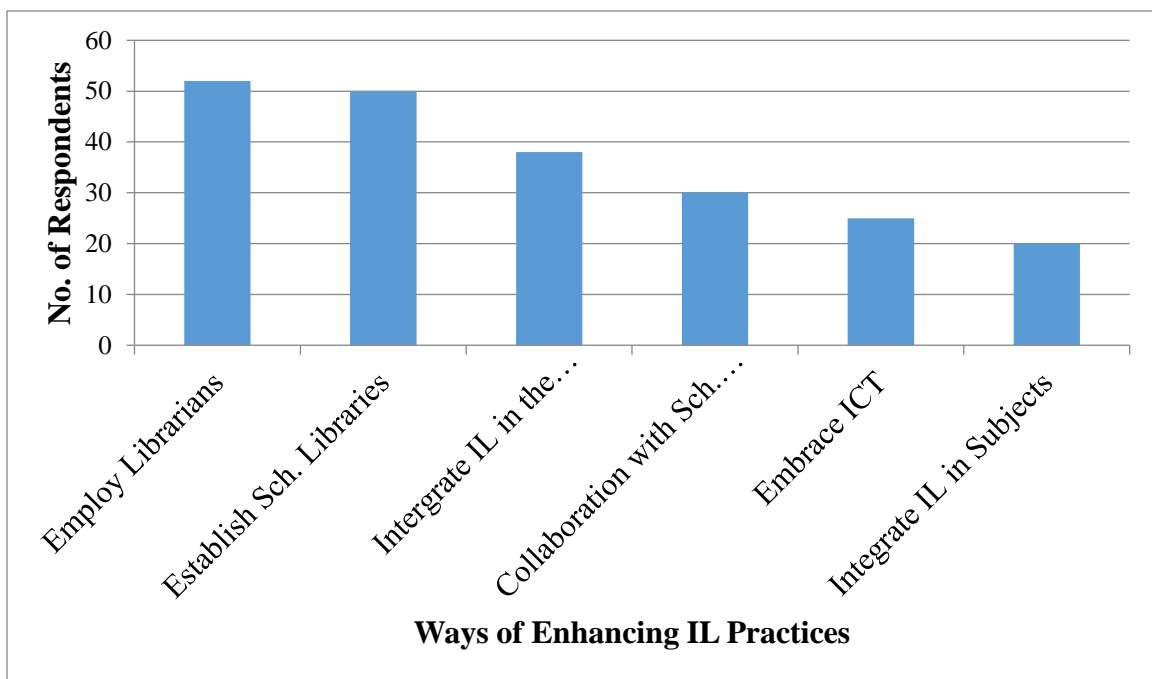
Source: Primary Data

Figure 2: Ways of Enhancing IL Practices in Secondary Schools

From Figure 2, 52(24%) respondents suggested that schools should employ trained librarians who should organise for workshops and seminars to train library patrons on IL skills. While 50(23%) suggested that secondary schools should establish school libraries, 38(18%) opined for the integration of IL in secondary schools' curriculum, 30(14%) proposed for collaboration between librarians and teachers in teaching IL, and 25(12%) recommended for embracing of ICTs in secondary school teaching. Finally, 20(9%) respondents suggested for the integration of

IL in some subjects including English and Kiswahili. Employing professional librarians to manage school libraries would give them an opportunity to inculcate IL skills to library users. Similarly the establishment of school libraries would influence users to learn IL skills for them to be able to make effective use of information resources held therein.

Similarly, responding to the ways in which IL could be enhanced in secondary schools all the 12(100%) key respondents interviewed were cognisant of their role as custodians of the school library resources. They believe that they play a role in promoting IL in their respective schools since they help library users to obtain information they need.

The respondents also opined that IL could be enhanced through continuous training of users and not a one-off training for form one students. Inclusion of library lesson in the teaching timetable, and adoption of ICTs in academic programmes was also noted as a way of enhancing IL among information users.

Lib2 noted "*encouraging teachers to use the school library will motivate students to also use the facility hence librarians would have an opportunity of inculcating IL skills to the students.*"

Teachers act as role models to their students therefore if they embrace the use of school libraries it will also encourage students to use libraries which may provide an opportunity for librarians to impart IL skills to students.

Lib4quipped "*information literacy should be made a subject to be taught as from the time students join secondary schooling*."

Embedding of IL in the secondary school timetable as a subject would afford it an opportunity of being taught thus imparting IL skills to the students during their secondary school life hence students could acquire these necessary skills.

5.1 CONCLUSION

The study established that library orientation and library hour IL practices were available in secondary schools but minimally practiced. Library skills lesson which is one of the IL practices was found to be unobserved in all the secondary schools. The observance of IL practices in secondary schools programme could help in inculcating IL skills among students. Therefore, students proceed to institutions of higher learning with minimal exposure to IL and lack the relevant IL skills required to make them independent learners in their pursuit for of knowledge.

It was established that some of the school/teacher librarians were not aware of the aspects that constitute IL. The findings from the interviews conducted with school/teacher librarians noted IL aspects to include library user instruction, user education, use of various library materials, library use in problem solving, use of information in assignments, sorting and presenting information, searching and locating information and recognizing the role information plays.

It was further noted that none of the subjects taught in secondary schools could be associated with IL. Although, subjects empowered students to be trained on some IL aspects including:

using information, identifying of a need for information, accessing information, evaluating information and legitimate use of information. However, due to inadequate knowledge in IL amongst students they were unable to make sense that these are IL aspects.

Students were cognisant that all subjects required them to make use of school libraries/book stores where they could borrow textbooks for class assignments. However, school/teacher librarians had minimal opportunity to offer meaningful IL instruction. Although school libraries played an insignificant role in promoting IL in secondary schools, IL practices are not effective because libraries do not play their rightful role of inculcating IL skills to library patrons. The success of IL initiatives would be a result of a collaborative approach between teachers and librarians. IL practices in secondary schools could be enhanced by employing trained librarians, establishing school libraries, integration of IL in secondary schools' curriculum, collaboration between librarians and teachers in teaching IL, and embracing of ICTs in secondary school teaching and integration of IL in some subjects.

6.1 RECOMMENDATION

This study makes the following recommendations based on the findings:

IL practices should be embedded into the secondary school curriculum so that it is effectively taught to inculcate IL skills among secondary school students. This would institutionalize IL practices in secondary schools and present an opportunity for students to learn IL skills which will enable them to recognize their information needs, locate and evaluate the quality of information, store and retrieve information and make effective and ethical use of information, and apply information to create and communicate knowledge.

The Government of Kenya is in the process of implementing a new education system of education popularly known as Competency Based Curriculum (CBC). The study therefore views this as an opportune time and recommends for the incorporation of IL in the CBC for ease of adoption.

The study also recommends for the adoption an IL programme in secondary schools. To embed IL practices successfully in a setting where they are insignificantly observed it would be through a comprehensive, formalized and sustainable programmatic approach.

It is important that students understand the programme aims, objectives and anticipated outcomes. This would in itself help to generate students' motivation to take the programme seriously. Secondary school students would have the opportunity to be equipped with IL skills.

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