RE-ENGINEERING INFORMATION LITERACY PROGRAMMES OF NAIROBI - BASED PUBLIC AND PRIVATE UNIVERSITIES IN KENYA.

BY

KINGORI, G. M.
University of Nairobi
Nairobi- Kenya: Email: kingorigm@yahoo.com
CHEGE, A
Moi University
Eldoret- Kenya: Email: mburuch@yahoo.com

KEMONI, H
Kenya Polytechnic University College
Nairobi- Kenya Email: hkemoni@yahoo.com

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ABSTRACT

The paper reports findings of a doctoral study at Moi University from 2006-2012.The aim of this study was to investigate the prospects of re-engineering information literacy programmes (ILP) in selected Nairobi - based public and private universities and develop a model that could be used to address the issue. This study was based on a mix of Jerome Seymour Bruner's (1971) theory of discovery learning and the Seven Ways or Faces model developed by an Australian – based researcher Christine Bruce (1997). The study design was both exploratory and cross-sectional. The data collection instruments included key informant interview schedules, questionnaires and observation checklists. University librarians were interviewed as key informants while lecturers and other library staff directly involved in information literacy initiatives were interviewed through in-depth face-face interviews. In addition, first year undergraduate students (first years or freshmen) from the sampled universities were interviewed through a questionnaire. Data from the questionnaires was analyzed and is presented as descriptive statistics such as frequencies and percentages. The qualitative data was analyzed and presented on the basis of the Grounded Theory approach which is concerned with the refining of ideas. The findings indicated that all the universities which were sampled have various information literacy initiatives which lacked a systematic approach and a policy framework. It is recommended that a four tier system for undergraduates, post graduates, teaching staff and research fellows, non teaching staff and visiting scholars in both public and private universities be established. The recommendations will inform the librarians, lecturers, university administrators, curriculum planners and education administrators about the importance of information literacy in the learning process.

KEYWORDS: Information literacy, Kenyan universities, Information literacy programmes, Universities, Kenyan students

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Introduction and Study Rationale

In a society engaged in the production of vast amount of information towards the pursuit of knowledge, information literacy is recognized as a fundamental ability. Information-literate people have the skills and knowledge to contribute to society because they are self reliant when making information-related decisions. "They know how to learn because they know how knowledge is organized, how to find information and how to use information in such a way that others can learn from them" American Library Association (ALA, 1989). These people are prepared for lifelong learning, whether it is needed to upgrade job skills, for career changes or for personal fulfillment. Information literacy skills begin with knowledge of the sources of information and the means by which to access them. Strategies for locating information, evaluating its effectiveness and reliability, and applying it to actual problem or question are learned skills. These skills should be an integral part of any curriculum striving for validity in a contemporary society.

The mission of a university is to be a centre of learning and scholarship and to prepare students for professional development and responsible citizenship while the library acts as a pillar of the parent organization. Both students and lecturers in the institutions of higher learning need skills to deal with the challenges of the information age. They need not only to find relevant information but also be able to evaluate and use it effectively. One of the major functions of a librarian in an institution of higher learning is to guide the major stake holders -students and lecturers to become critical consumers of information. According to (Taylor 2006) library instruction plays a critical role in the development of information-literate students who become active participants in their own learning and research. In addition, there is need of integrating information literacy programmes with the classroom teaching to enable students to see their relevance and at the same time empower them to be independent learners.

One of the objectives of university education is to make the student a more independent investigator in his/her discipline. The assumption is that the student possesses reasonable knowledge about the organization of materials in the library. However, this is not always the case. In fact most of the students especially the freshmen in our institutions of higher learning are illiterate in utilization of information resources in their respective libraries.

The introduction of 8-4-4 system of education in Kenya created a situation where more students had to compete for admission to university thereby necessitating the establishment of more public and private universities. As a result, the university resources could not cope with the large number of students who were admitted in terms of staffing, instructional materials and lecture halls. In order to meet these challenges, a common undergraduate course titled communication skills was started in all the public universities in the early 1990s. Since the introduction of the common under-graduate courses, the syllabus for communication skills has not been reviewed or updated. One of the three components of the communication skills course- library skills has some elements of the information literacy skills as defined by the Commission for Higher Education (CHE, 2008) guidelines.

A review of the literature demonstrates that information literacy (IL) is embraced throughout the world and also recognizes the fact that education in IL skills is essential for the production of a flexible workforce of lifelong learners who are a prerequisite to economic development in the information based economy. Lack of information literacy skills by students in our universities inhibits effective utilization of the information resources. For example, it has also been observed by examiners at the University of Nairobi that students' examination scripts, projects and term papers lacked diversity of thought and content. This is an indication that students heavily depend on lecturers' notes and that they were not able to use the variety of the resources in the library (Mathangani and Irura 2005:47-72).
Therefore it is necessary to offer a programme that will enable students in our universities not only to access, evaluate and use information in a variety of sources but also to become lifelong learners.

This study investigated the challenges inhibiting the development of comprehensive information literacy programmes in universities in Kenya and developed a model that could be used to address the issue. The three public universities are: University of Nairobi (UON), Kenyatta University (KU) and Jomo Kenyatta University of Agriculture and Technology (JKUAT) and the five private universities are: United States International University (USIU), Catholic University of East Africa (CUEA), Daystar University, Africa Nazarene University (ANU) and Strathmore University.
The interest to conduct the study of the public and private universities was prompted by the fact that the current orientation and user education programmes are not like the information literacy programmes offered in other world class universities because they lack diversity in terms of content and presentation. The eight universities based in Nairobi were selected because they are among the biggest in terms of enrolment of students and public spending. For example, the University of Nairobi is the oldest and the biggest public university in Kenya. Kenyatta and JKUAT hold the third and fourth places in terms of the establishment of the public universities in the country. Private universities in Nairobi are well grounded in terms of student enrolment and establishment. Since the researcher is a resident of the city of Nairobi, the time, cost and logistics of the field-work will be manageable. The eight universities are also held in high esteem by both local and international scholars, and the general public. Therefore, any changes of policy in the curriculum or teaching methodologies are likely to be emulated by other universities locally and abroad.

Information Literacy Initiatives in Kenya
In Kenya, user education programmes are well grounded in Teacher training institutions due to the efforts of the Kenya Institute of Education (KIE). The KIE is the body charged with the responsibility of curriculum planning and development in Kenya. The researcher was involved in teaching Library User Education (LUE) in one of the colleges from 1984-1996. LUE was given 12 hours on the time-table and it was a compulsory course and examinable in all teacher training colleges. Feather and Sturges (2003:646-648) define user education as training users how to use a library so as to find out where information is available, why a certain strategy should be used or what other sources can be exploited. Bibliographic instruction - also known as user education is widely practiced

in both academic libraries and special libraries and rarely in public libraries. Bibliographic instruction includes orientation, use of catalogues, bibliographies, collections and the online services offered by individual libraries. The term is falling out of use and is being replaced by training in information skills as part of information literacy.

Most public universities have orientation programmes which are offered to freshmen soon after admission. In addition, the communication skills course offered as a common undergraduate course in public and private universities has some elements of IL. Although the course was started with a lot of enthusiasm in the early 1990s in all public universities, little was done to motivate the lecturers or even update the course. As a result, the librarians abandoned the course when they realized that they were overworked without adequate compensation and recognition. In the Nairobi-based public universities, only the University of Nairobi appears to be mounting the original course in spite of the current changes in ICTs which have greatly affected the academic landscape. Although private universities give orientation to their freshmen soon after admission, there are no structured programmes. Some of the private universities also have courses related to IL. For example the USIU has a course known as First Year Experience (FYE) whose objectives are similar to those of communication skills in public universities. The FYE course is designed primarily for new students who have no previous college and university experience. (USIU Catalogue 2006-2008).

Statement of the Problem

One of the primary functions of a university library is to support the teaching and research needs of both students and staff at the university. In order to achieve this goal, it is necessary to inculcate an information culture through information literacy programmes to enable students to find information independently and use it critically. Although library orientation is offered to all freshmen soon after admission to all the universities, many of them are unable to use the information resources effectively. The sheer size of the library buildings in unusual surroundings overwhelms the students. Due to the number of students involved, time taken and the mode of presentation, it is likely that the objectives of the orientation process are not met.

Although orientation of freshmen has existed since the establishment of the public universities, coordinated Information literacy skills was started mainly in public universities in the early 1990s as a component of a "Communication skills" course. The communication skills unit is one of the common undergraduate courses whose objective is to improve reading, writing, information and other research and study skills. One of the main challenges facing the university libraries today is how to cope with the large number of students joining the universities especially after the influx of self sponsored students about a decade ago. According to Kiplang'at (1996), part of the failure in the implementation of user education skills was due to lack of clear guidelines and absence of appropriate teaching tools. An attempt to incorporate librarians as partners exposed serious gaps in the administration of the programme. Another concern is whether

integration of information literacy to other major courses is useful and the suitability of teaching tools or materials was also raised.

The multifaceted definition of information literacy poses serious problems in terms of devising practical information literacy programmes in an academic setting. This is further complicated by the diffusion of new technologies, information explosion and increase in information resources. Therefore, there is need to conduct qualitative research in information literacy programmes. This researcher has also observed that many students are admitted into the institutions of higher learning without basic library skills at a time when they are expected to write comprehensive term-papers on various subjects or topics. In order to address this anomaly, it is necessary for students to be information literate. IL skills would not only enable them to acquire a positive and responsive attitude towards university library resources, but also develop good reading habits and research skills.
In institutions of higher learning, students are expected to write term papers and projects and at the same time quote extensively their sources of information. Using another person's ideas without acknowledgement is unlawful. Freshmen are usually unaware about the dangers of plagiarism. Therefore, it is necessary to train university students especially freshmen to catch up with the fast growing information environment. Despite the availability of abundant resources, the majority of students and some members of teaching staff are not benefiting from them due to lack of Information literacy skills which would enable them to utilize the information resources effectively**.** If the vision of the institutions of higher learning in Kenya to become world class universities is to be achieved, then their graduates should be able to compete with the rest of the world in the job market. Undergraduate students are expected to become self-directed independent learners who are prepared for lifelong learning. In order to accomplish this, they need to become information literate.

The aim of searching information is to get the needed information from the available sources of information. However, it seems that orientation of freshmen and subsequent information skills component offered to undergraduates in our universities in Kenya does not adequately prepare them to use information resources effectively. Despite these initiatives, there is need to explore and analyze the status of the current user education programmes in universities. In this way, the study will be able to investigate the status of information literacy programmes offered in our universities and suggest remedies that can empower students become lifelong learners.

Aim and Objectives of the Study

The aim of the study was to analyze the current status of information literacy (IL) initiatives in selected Nairobi - based public and private universities in Kenya and to suggest ways in which information literacy programmes could be streamlined in line with global best practices. The specific objectives of this study were to: examine the current status of the existing information literacy initiatives in selected Nairobi-based universities; establish the structure of information literacy initiatives; examine the instructional methods used in information literacy initiatives; establish the ways in which university library management and faculty are involved in the implementation of information literacy initiatives; establish the major challenges facing provision of

information literacy initiatives and develop a model on information literacy programmes for universities in Kenya.

Theoretical Framework

This study was be based on a mix of Jerome Seymour Bruner's (1971) Theory of Discovery Learning which allows learners to think, learn and solve problems by themselves, Christine Bruce's (1997) Seven Ways or Faces model and Eisenberg's and Berkowitz's (1988) Big6 Skills for information problem solving.

Jerome Seymour Bruner's Learning Theory

George (1990:128) credits the work of Jerome Bruner and Robert Gagne as the educationists whose works are quoted repeatedly in journals of library instruction. According to Lee (2000) information literacy is implicitly tied to learning theories This is about how people learn to transform information into useable knowledge. The theory on discovery learning was developed by Jerome S. Bruner who is not only a developmental psychologist but also a learning and instructional psychologist. He has shown a lot of interest in how learning occurs; how teachers facilitate learning and he is also associated with discovery learning. In Bruner's (1971) view, discovery learning involves learners' discovery of what they are capable of doing and thinking for themselves. It does not necessarily mean coming up with unknown knowledge, but rather coming up with knowledge by one's self. He observed that a child is capable of discovering new information independently and that 'any subject can be taught effectively in some intellectually honest form to any child at any stage of development' (Bruner 1961:33). In order to encourage discovery, Bruner proposes that "it is vital to provide learners with opportunities to engage in thinking, insights and problem solving as an integral part of their education" which will ultimately lead to the discovery of principles and concepts underlying the subject being studied. At the beginning, the teacher present learners with a problem and play the role of a facilitator thereafter.

Advantages of Bruner's view of discovery learning are:

> *First, it enables learners to increase their ability to learn related material; second, it increases their interest in the task in which they are involved; third, it contributes to lasting retention of information; fourth, it makes the transfer of learning more probable; fifth, it develops initiative in dealing with similar problems; sixth, it trains in important thinking operations such as comparing, summarizing, interpreting and criticizing; and finally it teaches learners how to learn (Mwamwenda, 2004:193).*

In discovery learning, teachers give learners an opportunity of analyzing data by themselves which enables them to arrive at their own conclusions. Moreover this allows the learners to think, learn and solve problems independently. A number of topics that can be used for discovery learning include science projects, research, independent reading, weighing objects, solving problems and writing interpretive reports on given topics. During the learning process, the role of the teacher is to provide a feedback to the learners on their performance.

Bruner's (1966) theory of instruction stresses the importance of motivation, cognitive structure for effective learning, sequencing of information and reinforcement which encourages and sustains desirable academic social behavior.

This theory was found relevant in this study because when students visit the library, they have an opportunity to discover for themselves whether the collection contains the information required through self-discovery. Often students visit the library facilities to check for recommended text books due to the fact that lectures do not always exhaustively explain what is required in a particular topic. The solution to their needs lie in the extensive collection of literature in the library system of each university. In order to utilize the information resources effectively, users need instruction on library usage so as to break the communication barrier between them and the library. Since the purpose of information literacy is not only to answer questions for users but also to show them how to answer questions or solve problems for themselves, Bruner's views on discovery learning and his theory of instruction are applicable in this study.

Models of Information Literacy

Bruce's Seven Ways or Faces of Information Literacy

Bruce (1999) observes that most definitions of IL have dealt with broad descriptions rather than strict definitions. As a result, IL has been conceived as a synonym of information seeking and retrieval skills or as an umbrella for computer literacy, information retrieval skills and media competency. Bruce (1997) offers another alternative model of information literacy where she examines information literacy using phenomeno-graphic methods to determine how individuals experience information literacy. She identifies seven ways or "faces" individuals will adopt in information literacy. In this model, the author strove to explain and describe the differences in the way information literacy is conceived by people.

According to Bruce's model of information literacy we can see that the information literate person engages in independent, self-directed learning. This person furthermore, implements information processes and uses a variety of information technologies and systems. This person then has internalized values which promote information use. If you internalize a particular belief, attitudes or behaviour, it becomes part of your character. The internalization aids the information literate person to have a sound knowledge of the world of information. This person then approaches information critically and acquires a personal information style which facilitates his or her interaction with the world of information (Bruce 1995:158-70).

The Seven Ways or Faces model of information literacy is also a reflection of the changing learning environment due to the rapid development and diffusion of information and communication technologies in all walks of life. These changes will have an impact not only on the way libraries are organized, but also in the provision of services. In order to survive in this environment, librarians must also reexamine their critical role as mediators between users and technology. The new environment requires changes in education and training programmes for both librarians and library users.

Bruce's model was later partly supported by findings of two other studies by Orr, Appleton and Wallin (2001:457-463) and Maybee (2006:79-85).

The Seven Ways or Faces model of information literacy is relevant in this study because it explains how information literacy is experienced as a phenomenon. In order to access information, it is necessary for information technology to be available and usable; possess knowledge of information sources; the action taken or decision made is the process after an experience; the ability to acquire and retrieve information; the ability to evaluate and analyze information; acquisition of new knowledge through personal experience and making rational and informed decisions as a result of possessing updated information.

Eisenberg and Berkowitz (1988) Big6 Skills Model for Information Problem-Solving
The Big6 is a six step research model or process that was developed by Eisenberg and Berkowitz (1988). This is the most widely publicized and used model and is a useful approach to solving information problems and can also be integrated in the information literacy curriculum. The Big6 has the following steps:-

- Task definition
- Information seeking strategies
- Location out access
- Use of information
- Synthesis and
- Evaluation

The Big6 Skills for information problem- solving gives students a systematic framework for solving information problems and that it can be used by students at all levels from elementary schools to corporate training. Since the Big6 skills process is a wonderful model for planning and development of curriculum it was be used by the researcher as a basis to develop information literacy model and programmes for universities in Kenya.

Research Design
This study adopted an exploratory approach using a descriptive survey design to investigate the prospects of reengineering information literacy programmes in Nairobi-based public and private universities in Kenya. The study was a cross-sectional sub-type of survey research design because it involved the views of the major stake-holders in information literacy related initiatives. This study used both quantitative and qualitative methods to corroborate the findings. According to Bryman (2004:454-5) the idea of triangulation "implies that the results of an investigation employing a method associated with one research strategy are cross-checked against the results of using a method associated with the other research strategy". In other words, more than one method is used in the development of measures to which ultimately gives greater confidence in the findings.

In this study, both qualitative and quantitative methods were applied to collect data. According to Bryman (2004:19-21) the strategy was used to emphasize quantification in the collection and analysis of the data and by contrast qualitative research was adopted to

emphasize words rather than quantification in the collection and analysis of the data. The combination was in appreciating the striking differences between the two approaches in terms of the role of theory, epistemological issues, and ontological concerns.

The methods of data collection in this study included personal interviews, questionnaire, observational methods, and secondary data analyses such as literature review. Interviews with University Librarians, Librarians and Lecturers who are directly involved in teaching IL in the various universities were carried out to investigate the prospects of re-engineering information literacy programmes in selected Nairobi - based public and private universities in Kenya and develop a model that could be used to address the issue. The questionnaire items assessed the information needs of one of the major stake holders of university libraries - students. Other considerations were the facilities, human and material resources, including policies and practices within each university library system. The questionnaire for the Students had both multiple choice or closed questions and open-ended questions. In the former form, questions were easy to answer and inexpensive to analyze, whereas in the later form, they are not easy to handle, and raised problems of interpretation and interviewer bias according to various authorities. In this way the researcher was able to pick the steps that led to a final effect. Therefore, the researcher examined the outcomes or processes of specific programmes. The survey enabled the researcher to obtain information on a wide variety of variables including attitudes, opinions, preferences and behaviour. The survey method made it possible for the researcher to discern the kind of information needed by users as well as the sources of information in a given collection. Thus, the method was used to collect data from the respondents to assess whether their information literacy skills are adequate in a modern university library system

Study Population (Staff and Lecturers)

The study population comprised Library staff and lecturers. Out of these, there were 6 university librarians, 6 deputy university librarians, 29 librarians and 14 lecturers directly involved in information literacy related initiatives. The study size therefore comprised 57 interviewees that were interviewed and constituted the key informants of the study. The audio-taped interviews were transcribed and analyzed using the grounded theory technique. The interview schedule constituted the major instrument for collecting data for the study. (Strauss). Although the interviews generated mainly qualitative data, the purpose of the statistics indicated in the tables was to show frequency of the themes occurrence. The data is further followed by suitable quotes from the transcripts of the interviews. Response from the respondents especially those who were interviewed were prompt. However, in instances when the respondents refused to be audio-taped, it took longer to fill the interview schedules. Sometimes the interview schedules were left and collected later after a follow-up either by telephone, SMS or E-mail services.

The response rate from the purposely selected University Librarians and the Deputy Librarians was 100%, while that of Librarians and Lecturers directly involved in information literacy related programmes was 90% and 85% respectively.

Study Population (Under-graduate Students)

The study population for this study was 12,571 under-graduate students (first year or freshmen) from eight public and private universities. Student participants in the study

were selected proportionately from each of the colleges and schools because they vary in size and population. According to the table for determining sample size from a given population by Krejcie and Morgan (1970), the representative sample size required for 12,571 under-graduate students (first year or freshmen) was 2,371 as shown on Table 4.1
Data collection was done from the target population of 12,571 undergraduate- module I students (commonly known as regular students) during the academic year 2008/2009. Although the number of part-time or Module II students registered during the same period accounted for a large number of students especially in public universities, only a few departments have integrated classes of regular and part-time students. As a result, majority of part-time students were included in the study due to logistic problems. This is due to the fact that part-time students attend classes at very odd hours i.e. between 5.00 pm.-8.30 pm. from Mondays through Fridays and from 8.30 am-4.00pm on Saturdays. Others are distant learners and only appear on campus during the school holidays i.e. during the months of April, August and December. The researcher used face-to-face interviews in administering the questionnaires due to close proximity of the eight universities where the students are located and geographically concentrated.
This study used both probability and non-probability sampling methods. Probability sampling method as the term implies yields probability samples while the non-probability method yields non-probability samples.

SUMMARY OF KEY FINDINGS

A SWOT Analysis of Resources for IL Initiatives

A SWOT analysis was conducted on the current status of IL initiatives as shown on Table 1. The purpose of the SWOT analysis was to build on the strengths, minimize the negative impact of the weaknesses, seize the opportunities and deal with the threats that were identified. After a critical evaluation of the existing programmes, it was also possible to determine factors that were likely to influence libraries to achieve their stated missions and goals. Consequently, it was be possible to chart the way forward for the university libraries to re-engineer the current IL programmes as shown on Table 1.

Table 1: A SWOT Analysis of Available Resources for IL Initiatives in Universities in Kenya

STRENGTHS	WEAKNESSES
➢ Large and diverse collection ➢ Long opening hours ➢ Highly qualified staff ➢ Adequate space for lectures ➢ Existing Infrastructure ➢ Adequate computers ➢ Networking ➢ Recognized as a component of a common course (communication skills) ➢ Support and goodwill from university librarians ➢ Committed and hardworking staff ➢ Exposure to all types of information	➢ Lack of administrative support (money) ➢ Time (preparation & teaching) ➢ Teaching skills (assessment & evaluation) ➢ Inadequate teaching materials ➢ Motivation (lack of interest) ➢ Attitudes of library staff (a few not supportive) ➢ Lack of a formal syllabus ➢ Library organization ➢ Lack of library staff interest ➢ Audience definition (who to teach and what to teach) ➢ Lack of clear guidelines and standards (CHE standards and guidelines very thin) ➢ National coordination lacking ➢ Limited library/faculty collaboration ➢ Insufficient staff ➢ Low band-width ➢ Unreliable internal connection due to power failure

OPPORTUNITIES	THREATS
➢ Internet connectivity ➢ Cost of software and hardware decreasing by the day. ➢ Promotion of information literacy among students and staff ➢ Enhances visibility of university ➢ Enhances national, regional and international cooperation ➢ Circulation of information resources ➢ Appreciation of the role of the university library in university ➢ Training of both students and staffs	➢ Low morale among library staff. ➢ Lack of cooperation among staff ➢ Lack of interest among students ➢ Low level of funding ➢ Fear to those unwilling to adopt new technology ➢ To institutions without ICT policy ➢ Fear of unknown to Staff who resist change ➢ Low level manual jobs

Strengths of Available Resources

Most of the libraries in Kenya are housed in magnificent buildings with reasonable furniture and computer labs. They are well stocked and managed by well trained professional staff. All of the universities studied have automated most of the major operations like acquisition, processing and circulation and the band-width is improving by the day. Therefore the universities can build on the strength of the diverse resources for example by maximizing the utilization of the infrastructure, staffing, material resources and information and communications technologies (ICTs).

Weakness of Available Resources

It is necessary to address the weaknesses so as to minimize their negative impact on provision of IL programmes. In order to move forward, it is necessary for universities to understand where they are and also plan how to address the current challenges now and in the future. In some instances, some IL related programmes have failed to continue due to lack of support by the university administrators. One of the biggest drawbacks is lack of adequate time in the scheduled time-table. Although the IL programmes are taught by librarians, some of them are not conversant with the teaching methodologies. In some instances, there is rivalry between Communication skills departments and the Library department over teaching responsibilities including content. This rivalry became more pronounced soon after the module II programmes were introduced especially in public universities when teaching staff started being paid according to the number of hours taught beyond the normal teaching load.

Existing Opportunities for IL programme

Since the introduction of performance contracting, it is clear that the government has embraced change in the management of education in Kenya and this includes institutions of higher learning. In the process many universities have become ISO certified. This is a clear indication that the universities have readily embraced change in all areas including curriculum development. Universities librarians should therefore take this opportunity to introduce formal IL programmes and especially take the advantage of internet connectivity which has improved while the cost of both software and hardware is significantly decreasing by the day. This is also a time to train library staff, students and teaching staff. This is also a good opportunity for libraries to improve local partnership with the faculties, and also forge new relationships with both national and international organizations.

Dealing with the Threats to IL programmes

The development of science and technology and globalization of the world economy in the last decade has made tremendous improvement and changed all walks of life. Technology has revolutionized the way we work including the education sector. In order to remain relevant in the information age, both students and teachers need to be retrained. Due to the increasing number of students in institutions of higher learning, the cost of education has become a burden to the country. As a result, university budgets are inadequate and this affects allocations for university libraries. This also adversely affects staff salaries and other personal emoluments which are not in tandem with the cost of living. This is one of the causes of poor morale among university staff. Lack of

cooperation between library and faculty is lacking in some universities. There are still a number of staffs who resist change and are yet to embrace new technology.

The Way Forward

The respondents were asked to indicate what should be done to improve the situation. The purpose of this question was to get new insights on the way forward. In order to improve the current status of both public and private universities, it was realized that the management should take the following measures:

- Provide more computers.
- Allocate adequate contact hours.
- Design the curriculum that runs for the few years when students are on campus.
- Authorize a formal course.
- Ignore the campus politics.
- Include IL programme in the university time calendar.
- Upgrade the course.
- Provide relevant materials, human resources and physical facilities

Goals and Objectives of IL initiatives

The study revealed that the goals and objectives of the information literacy initiatives in the eight universities studied had a lot of similarities. The major goal of information literacy initiatives in all the universities studied was to empower users to be self reliant while accessing information resources. However, it was agreed that an information literacy programme should be designed to ensure that all categories of users are literate in the use of information resources not only in the library but also those available in the internet. After appreciating the value of a library as an invaluable source of information, students should be able to seek and manipulate the information resources. In summary the respondents felt that all efforts for establishing a formal information literacy (IL) programme should revolve around empowering the patrons so that they are able to get the information independently and equipping them with lifelong skills that they can use long after their university education. In order to survive in the academia, it was necessary to encourage students to possess research skills while at the same time observing ethical issues related to academic writing such as copy right laws. Since poor reading culture was a great impediment to academic excellence among many students, inculcating a reading culture was identified as another important goal that would facilitate lifelong learning.

Status of Information Resources and Services

It was established that both public and private universities had similar hours of opening throughout the week including weekends especially on Saturdays. Others open for a few hours on Sundays, while most are open only during the day during vacation. The major users of the university libraries are undergraduate and post-graduate students, teaching and non teaching staff. Occasionally, researchers with credible evidence are also allowed to utilize the university library facilities. The main access tool for all the university libraries surveyed was the Online Public Access Catalogue (OPAC). A few of the university libraries had retained their manual card catalogue for books and Kardex for

periodicals. In addition to reading tables and carrels, all the libraries allowed users to carry their own reading materials and also to use personal laptops within the libraries. Some of the libraries had computer labs inside the library buildings while others were adjacent to the library. A few libraries had special rooms for post-graduates where specialized materials and equipment were available.

Status of Automation of University Libraries

In order to establish the status of automation in university libraries, the respondents were asked to state the library functions or operations that were automated and also indicate the software used. It was found out that all the universities surveyed were members of the Programme for the Enhancement of Research Information (PERI) through the collaboration of the International Network for the Availability of Scientific Publications (INASP) which enabled their users to access both e-journals and e-books. Due to PERI programme, most of the public and private (P&P) universities were connected to major databases like MCB/Emerald; Africa journals online (AJOL); Blackwell-synergy; AGORA among others. Due to the membership of PERI programme both public and private universities were also members of other consortia like Kenya Library Information Services Consortia (KLISC) and INASP. In addition KOHA software programme was the most popular among universities because it was web-based, free and versatile.

When problems arose, some universities resorted to the British library document handling services which provided articles that were not available through KLISC. It was also noted that all the public and private universities surveyed had e-mail and website addresses.

Staff development for information literacy initiatives in Universities

It was agreed by most of the respondents that the category of staff that should be involved in IL programmes should be professional staff with a masters degree and above in information science. In other words, the member of staff should have the minimum qualifications for appointment as a lecture in a university. Although all the sections of the library are very important, a few recommended that the reference librarian is best placed to facilitate and coordinate IL programmes.

In order to enhance and maintain sufficient knowledge and skills for teaching staff, it was necessary to have regular seminars and workshops on current teaching and learning trends. Adherence to the set standards by the Commission for Higher Education (CHE) should be observed. In addition, effective coordination by the library department, adequate learning materials should be provided. Staff development efforts like continuing education for staff directly involved should be encouraged.

Structure and Contents of Information Literacy Initiatives

It was established that there was no standardized name or title that had been given to information literacy related programmes found in Kenyan universities. However, the study also established that the IL related programmes offered by both private and public universities in Kenya had various titles which differed among the universities that were surveyed.

It was also agreed that there should be a library skills course which should be a core course for all freshmen. The updated course should be separated from the communication

skills course and take the same contact hours as other units at the universities in terms of theory, practical sessions and examinations.

Generally the contents offered by communication skills departments included reading skills; writing skills; functional and presentation skills; speech making. Other course contents are ICT skills/computer skills; internet and its use. The internet particularly engaged the students in searching skills and techniques as well searching tools. In some university libraries, students were also taught about information access and retrieval; evaluation of information sources; intellectual property rights; documentation and referencing and knowledge organization. Among others, an IL programme should include the following: Information skills; computer skills; reading skills; writing skills; critical thinking; functional skills; public speaking skills; documentation and referencing; intellectual property rights; evaluation of information resources (both print and electronic); and knowledge organization.

Instructional Methods Used by Instructors

The respondents were asked about the methods of instruction used while conducting information literacy related courses. The study revealed that the most popular teaching method used for delivery of information literacy initiatives by the majority of teachers were lectures which were sometimes combined with demonstrations in the lecture hall or preferably in the library or computer labs. The respondents also emphasized holding seminars and workshops for trainers on a regular basis. The trainers were encouraged to read widely and engage in continuous research. In a few universities regular trainings were held for the instructors. At the same time, the key informants reiterated that conferences and symposia for the instructors were mandatory.

Assessment of Information Literacy Initiatives

Frequent and systematic monitoring of students' performance enables the instructor to monitor the progress achieved in the learning process.. In two out of eight of the universities surveyed, assignments were given to the freshmen after the orientation session that is normally offered soon after admission. This kind of feedback enabled the librarians to know the effect of the orientation programme immediately. Therefore a follow up mechanism should be put in place and encouraged in all universities. Others just informed their clientele to go for consultation whenever there was a problem. It was only in one university where formal lectures assessment was done because the library skills course was a component a common undergraduate programme that is known as communication skills.

Evaluation of Information Literacy Initiatives

The information literacy programme evaluation was expected to assist the instructor and other stake-holders to analyze the strengths and weaknesses of the curriculum. In order to find out whether evaluation of IL programmes was done, the respondents were asked to indicate whether evaluation of information literacy initiatives was done in any of the university libraries. Although a quarter of the eight universities that were surveyed claimed that they had evaluated their programmes, there was to tangible evidence to back the claim.

Students' perception on university library systems

In order to find out about the students' overall feelings about the delivery of literacy programmes in universities they were asked a closed ended question. Less than half of the students, that is 44.8% found the library ok but not thrilling, the general feeling here was that almost half of the respondents were not impressed by the library services and facilities. Therefore there is need for the library staff to pull up their socks in this direction so as to improve the image of the library as suggested by most of respondents.

Use of in-house data bases

From the key informant interviews it emerged that on average, a great numbers of students in universities seemed not to be using the in-house data bases due to lack of awareness. Therefore university libraries need to take urgent measures in dissemination of information resources through marketing. In order for students to utilize the information resources effectively, the library management has a responsibility of making sure that the collection is updated to include current and relevant information; maintain a highly disciplined staff, friendly and helpful to the library users; improve the current awareness services in the library; equip the library with adequate computers for searching information on the internet and electronic databases.

Collaboration of IL Initiatives in Universities

The key informants- the university librarians, librarians and lecturers in communication skills were asked to indicate the relationship between the library and other departments that were directly involved in information literacy initiatives. The study found that librarians generally cooperated with their respective communication skills and computer departments in their institutions. They also cooperated with the communication skills departments on IL related issues like time tabling and assessment but consulted the computer departments on ICTs related issues like hardware and software, bandwidth, networking, repairs and maintenance of the same. In addition, the computer departments provided technical support to the libraries on information technology related issues to both on-site and remote users.

Although there was reasonable contact between the library and faculty at the undergraduate level due to the common course known as communication skills, there was very little collaboration on issues of post graduate students and also the teaching staff. This is an area that is still largely neglected and universities should commence formal information literacy programmes for both post-graduates and the teaching staff.

Challenges Encountered During Implementation of Information Literacy (IL) initiatives

The respondents were asked to highlight the challenges encountered when conducting the information literacy initiatives. This question prompted interesting and varied answers. A number of reasons were given as the cause of failure of information literacy initiatives in both public and private universities as summarized below:

- Lack of interest by users
- Non-cooperation or rather lack of interest by teachers in academic libraries
- Lack of time by users as well as teacher librarians
- Lack of systematic approach by reference librarian

- Lack of understanding of psychology of users by reference librarian
- Lack of individual attention due to the large number of users involved (especially in public universities)
- Poor or improper teaching methods
- Lack of support by Administration
- Lack of proper teaching tools e.g. OHP
- Lack of recognition by the management of the parent organization

Conclusion

The paper discussed the major findings of the study based on the objectives and research questions of the study. It was established that the major goal of an information literacy programme was to acquire skills that enabled students to use both printed and electronic sources. However, it was noted that orientation was the major IL initiative in both public and private universities that was practiced adequately and almost in a similar fashion. The other major initiative was communication skills that was taught as a common course in all the universities surveyed, but the contents, duration and teaching methods varied from institution to institution. Although most universities have spacious lecture halls and computer labs that are ideal for instruction and demonstration, they are increasingly becoming over-stretched due to the large number of students being admitted. The findings confirmed that students' access to information is inhibited by several factors namely: information explosion; ignorance of existing information resources; scatter of information; lack of awareness and variety of information formats. However if the university librarians, faculty and the top university administration collaborate by developing policies and adopting standards that are being applied in other parts of the world, the current status of information literacy in our universities will definely improve in content and delivery.

RECOMMENDATIONS

Development of Information literacy policy framework

The study established that lack of a policy frame work for information literacy in most universities in Kenya was the biggest impediment in the development of IL programmes. In order to fill this gap, there should be an information literacy framework for all public and private universities. The new policy will address the existing challenges facing IL and also provide a comprehensive framework of IL programmes.The aim of the policy will be to provide guidelines on effective and efficient delivery of information literacy programmes.

Organizational structure of information literacy programmes

In order to enhance information literacy programmes, an information literacy unit should be created in every university and or in its constituent colleges for implementing the curriculum on information literacy and also for sensitizing the importance of information literacy campus. The information literacy unit should be headed by the IL coordinator, assisted by a deputy coordinator, and a representative from each college. It is proposed that initially the unit should be hosted by the communication department or any other closely related department in each of the universities. Later it is expected that the IL unit will be a fully fledged university department.

Information literacy physical resources and graduate library

Although most of the universities have modern buildings purposely built as libraries, they should also be equipped with comfortable furniture, modern information and communication technologies (ICTs) and adequate connectivity. Those with inadequate teaching space should improvise to enable all the classes to be adequately equipped with teaching facilities/tools like computer labs, white boards, white board markers and LCDs. Since only a few libraries had special rooms for post-graduate students, it is also recommended that a Graduate Library be introduced in all universities so as to allow libraries to focus their services to under-graduates especially first year students. This includes providing remote access of library resources to enable them access e-journals and e-books.

Creation of awareness and promotion of information resources and services

In order to address the significant number of students who rarely visit the university libraries, university librarians in conjunction with the university administration should try to address the underlying problem of non-use through awareness campaigns and information literacy programmes. Other methods of promotion include library bulletins, newsletters, intranet, blogs, both staff and student emails and other social networks. Since poor reading culture is a great impediment to academic excellence among many students, inculcating a reading culture was identified as an important goal that should be pursued to facilitate life-long learning.

Level of customer satisfaction by university libraries

There is need to have periodic user surveys to determine students' needs including their level of satisfaction. A suggestion box which lacked in some libraries would be the first step towards this direction.

In order to improve the current status of both public and private universities, the management should take the following measures:

- Provide more computers.
- Allocate adequate contact hours for delivery of information literacy, that is scheduling more time in the time table
- Design an information literacy that is embedded in the curriculum that runs continuously during the students' life on campus.
- Authorize a formal course like stand-alone or course-integrated programmes.
- Ignore the campus politics that is negative to the development of information literacy.
- Include information literacy programmes in the university calendar.
- Upgrade information literacy related courses.
- Provide relevant resources: both print and electronic materials, human resources and physical facilities (infrastructure).
- Encourage students from the onset about the importance of the library by mounting good eye catching displays, like getting non-academic (leisure reading materials).
- Widen the scope of the journals subscribed by the Kenya Library and Information studies consortium(KLISC)

Information literacy curriculum

The existing library systems and services meet the students' information needs and expectations only to a certain extent. Since orientation and information literacy related courses are conducted soon after admission and when students are fresh on campus and probably in new surroundings, they are likely to be overwhelmed with information. As a result, there is need for a follow-up because information literacy should be a continuous process as most of the interviewees mentioned.

Although there were several information literacy initiatives in the universities, the study established that information literacy programmes (ILP) are not well established in most public and private universities in Kenya. Therefore all universities should establish information literacy (IL) section that would be responsible for coordinating IL programmes. It is also recommended that IL programmes should be embedded in the university curriculum and at the same time make it a compulsory course taught and administered by the proposed IL department.

Structure and duration of IL programmes

It is being recommended that there should be a library skills course which should be a course unit for all freshmen. The new updated course should be separated from the communication skills course and should take the same contact hours as other units at the universities in terms of theory, practical sessions and examinations. The majority of university librarians suggested a ratio of 60% for practical sessions and 40% for theory.

There is need to streamline information literacy programmes in all P &P universities in Kenya. This should begin by having a standardized curriculum with an acceptable name and course content or descriptions by all the stakeholders. The CHE has authority to give a lead towards this direction. In addition, a body for coordination of IL programmes should be set up to initiate and develop a viable curriculum under CHE guidelines.

(i) Course structure and contents: The management of each institution should decide whether to introduce a stand-alone programme or the integrated programme.
(ii) Comprehensive content coverage for IL programmes is vital for lifelong learning.
(iii) Due to the logistical problems the majority of the interviewees preferred a stand -alone programme for the undergraduates (common undergraduate course)
(iv) An integrated programme would be ideal for the post-graduate students.
(v) Facilities (equipment and furniture): The programme should be taken in formal classes except when students are doing practical sessions.
(vi) Development of the programme through updates.

Contents and Delivery of IL programmers

There is need to have periodic user surveys to determine the needs of students including the level of satisfaction. A suggestion box is a first step towards this direction. There is need to streamline information literacy programmes in all P &P universities in Kenya. This should begin by having a standardized curriculum with an acceptable name and course content or descriptions by all the stakeholders. The CHE has authority to give a lead towards this direction.

In addition, a body for coordination of IL programmes should be set up to initiate and develop a viable curriculum under CHE guidelines.

Since there is no standardized name or title that has been given to Information Literacy related programmes found in Kenyan universities. It is necessary to have:-

i) An acceptable and standardized name with course description in all P & P universities.
ii) Streamlining the contents of the IL programmes
iii) A body responsible for IL programmes in all P & P universities should be formed so as to set up, develop, plan and initiate them according to CHE guidelines.

The IL programme should be a core unit with theory, practicals and examination for the first years. Library staff should be the instructors/lecturers in programme and they should be allowed time away from their daily library work to prepare for the lectures, teach, set exams and mark them.

Mode of Instruction

Information literacy is a continuous process. Users should be reminded that they need hands on experience if they expect to remain literate.

It is recommended that the methods of instruction be the preferred teaching methods: Lectures, demonstrations, library tours, and discussions should also be among.

It is further recommended that provision of IL programmes can be enhanced through teaching materials: computers, LCDs flap charts, white board markers and other stationery should be availed.

Standardization of IL programmes

Standards for libraries are dynamic instruments for the development of libraries in a given area or region and have a significant effect on quality of services provided by universities. The information literacy competency standards for higher education outline the framework for the university librarians and faculty and identify specific indicators for identifying a student who is information literate. Although most of the universities surveyed had IL programmes with a mission and educational objectives, others had no clear guidelines regarding their programmes. It is therefore necessary for all universities to develop effective instructional programmes as provided by the American Colleges and Research Libraries (ACRL) guidelines (2003) and the Commission for Higher Education (CHE, 2009) in Kenya. Although the CHE in Kenya Can be commended for having initiated the guidelines mentioned above, much more needs to be done in terms of creating awareness, planning and development of IL curriculum, assessment and evaluation and implementation of IL programmes especially in the institutions of higher learning where they are mandated to do so.

Due to the fact that the Commission for Higher Education (CHE: 2008) is shallow in details on curriculum planning and development in IL, there is need to revise this document so as to enhance its role in university education in Kenya. This can be done by adopting the best practices in the world for example, the American library Association (ALA) standards

Assessment and Evaluation

It is necessary to assess students so as to determine the learning outcomes and also evaluate the programme.

- Evaluation through user satisfaction surveys is key to maintaining quality standards.
- By having assessment tests and regularly evaluating the information literacy programmes.
- By advocating for adequate library budgets for setting and development of IL programmes.
- IL programme be made formal.
- The IL programme should be examinable so that students can be serious.
- The IL programmes should be made a stand-alone unit compulsory to all students in all faculties.
- The IL programme should be taught by professional librarians preferrably with a master's degree. This category of staff are equivalent to the minimum qualification required for a lecturer by most statutes of both public and private universities.

Training of staff for IL programmes

In order to enhance and maintain sufficient knowledge and skills to the teaching staff, it is necessary to have regular seminars and workshops on current teaching and learning methods and also on best practices. Staff development efforts like continuing education for staff directly involved should be encouraged. All staff, directly involved in teaching duties should be trained in teaching methodologies and ICT skills. Staff development efforts like continuing education should be encouraged

Category of teaching staff

In order to provide effective and efficient IL programmes, it is recommended only professional staff with a master's degree and above in library or information science or members of staff with minimum qualifications for appointment as a lecture in a university should be involved in teaching activities coordinated by the IL course coordinator.

Other categories of library staff like senior library assistants and library assistants are able to give guidance and assistance during practical sessions outside the classroom.

Adequate learning materials and equipment should be provided. This includes furniture like desks, tables, computers, white board markers etc.

Stand alone course

Collaboration with libraries and colleges/faculties

Collaboration with colleges or faculties and administration is critical for the success of information literacy programmes; The establishment of good relations and collaboration with other faculties will enhance evaluation and assessment of the IL programme;

Staffing of IL Programmes

Category of staff: Only professional library staff with a masters degree and above in library science or members of staff with minimum qualifications for appointment as a lecture in a university should be involved in teaching activities coordinated by the reference librarian.

Other categories of library staff like senior library assistants and library assistants are able to give guidance and assistance during practical sessions outside the classroom.

Continuous training of staff was considered very critical in maintaining effectiveness. It was also emphasized that holding of seminars and workshops for trainers on a regular basis would have a positive impact.

Staff members should be encouraged to attend both local and international conferences so as to benefit from new experiences and also build their career paths. Motivate the teaching staff; Create facilities required for instruction and by educating all library staff on the importance of IL programmes.

Funding of IL Programmes

Most information literacy programmes failed due to lack of support by the top managers in the university administration. If the administrators of universities are sensitized on the importance of information literacy in the learning process, they are likely to support libraries through additional funding. In addition, all the activities and tasks regarding information literacy programmes should be reflected in the library annual budget so as to ensure that adequate amount is provided.

Designing a Model of Information literacy (IL) programmes

.The researcher strongly recommends that there should be a four tier system for undergraduates, post-graduates, teaching staff and research fellows and open short courses on topical issues for administrators, non-teaching staff and visiting scholars in all public and private universities as shown on Figure 2. It is also recommended that the proposed IL model should be implemented in all university libraries in Kenya as suggested below:

i. That a stand-alone information literacy (IL) programme be offered to ALL undergraduate students under the Board of Common Undergraduate Courses (BCUC).
ii. The proposed programme entails upgrading the contents of the current library skills component offered under the auspices of the communication skills department. The contents of the proposed IL programme appears as an appendix in this thesis.
iii. That information literacy (IL) course unit should be incorporated in the post-graduate curriculum in collaboration with both the faculty and the library department.
iv. That information literacy (IL) seminars and workshops for academic staff be held regularly.

Information Literacy Needs

Information literacy is a process which gives students the skills to solve their problems. The model begins with the identification of the needs of students. In order for meaningful

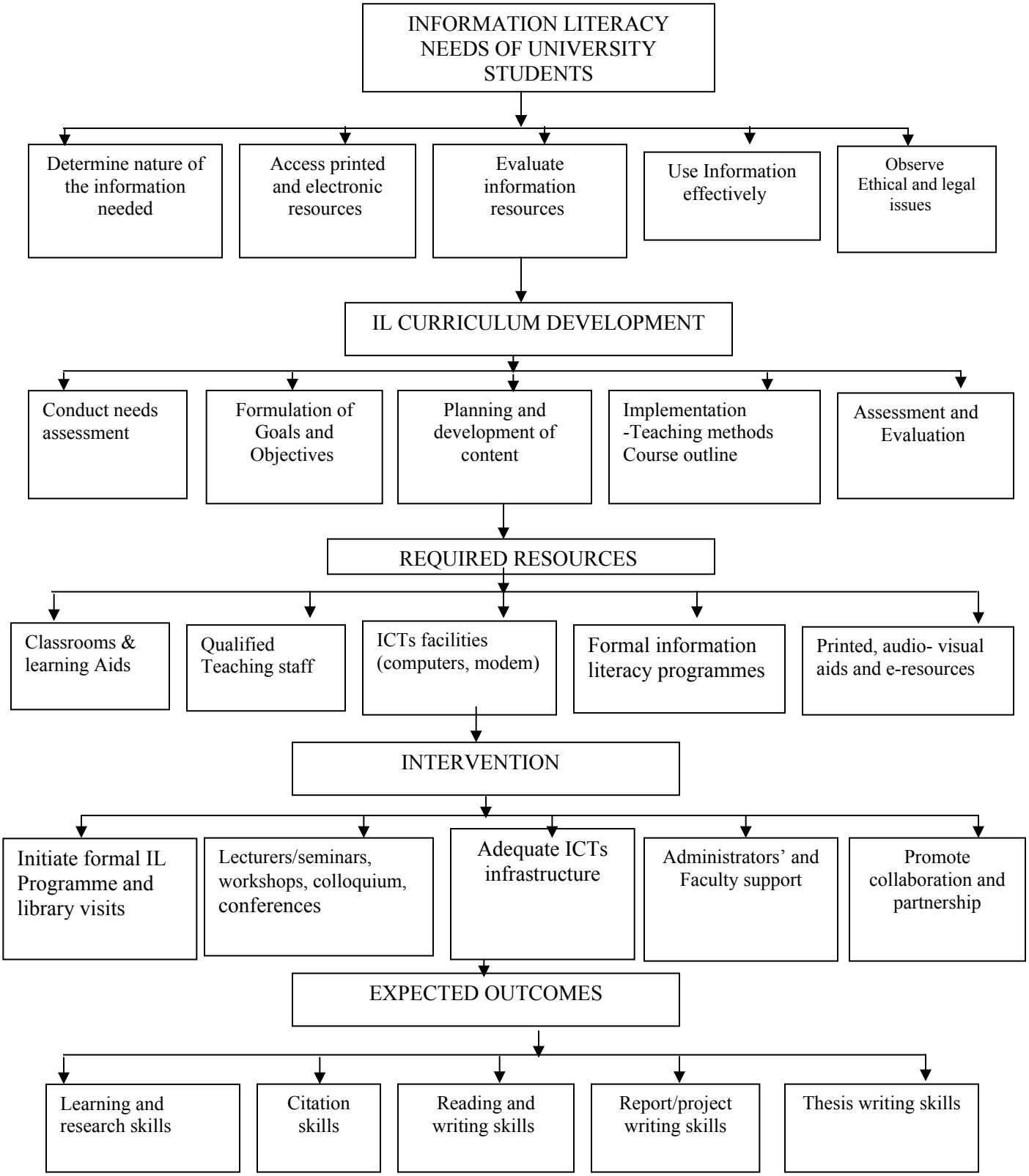
research to take place, a problem must be identified. Similarly the students must have an expressed need or a problem to be solved.
The expression of the need for information is the beginning of the search process. Since the student is aware that the needed information is available in the library, the first step is identification of the material needed through the available tools in the library. In this case, the most obvious tool is the online public access catalogue (OPAC).
The next step in this process is accessing the information needed.

Search Strategy
The next step is the search strategy, the student is aware about the variety of resources available in the library i.e. printed materials like books, periodicals, e-journals and e-books. In order to get specific items, it is necessary to determine the search strategy. The items can be searched through author, title or subject entries.
The search strategy reveals the available resources only to the extent that the student is able to manipulate the OPAC.
If the student is computer literate, there are likely to be fewer problems. But orientation sensitizes the students on basic information and skills.

Intervention
The majority of freshmen are admitted to university from schools without organized libraries. As a result they are ill equipped in the research process. It is therefore the responsibility of universities to initiate IL programmes to enable the freshmen to utilize the available resources effectively. In addition to the physical facilities, both material and human resources are required. For instance, more computers, qualified staff and supportive administration are some of the items on the checklist for a workable curriculum.
In order to create an enabling environment, the librarian should be in a position to lobby for the administrators support. This is includes collaboration with faculty.

Expected outcomes
The expected outcomes are the objectives of the IL programme which includes skills for lifelong learning and must pegged against the standards set by the policy documents. The success of the programme also depends on its implementation. The programme must have benchmarks against which students learning should be measured. This will act as an assessment tool to find out if the objective of the programme were met.
If the model is followed, it will improve the IL skills of the freshmen at the present and also for the future. The learned skills will be used not only at the undergraduate level but will also form a good foundation at the post-graduate level.

Figure 2 Proposed Information Literary (IL) Model for Universities in Kenya.



The proposed IL model for university libraries in Kenya

How will the model work?

The purpose of the model is to show a graphic representation of how IL programmes should be structured. The proposed IL model for university libraries in Kenya comprises four tiers as follows:

Tire 1-This will be a common undergraduate (freshmen) information literacy proramme offered to all freshmen so as to enable them to utilize information resources effectively.

Tier 2 -This will be a Post graduate information literacy programme. The information literacy course units will be incorporated in the post graduate curriculum in collaboration with the library department. In this arrangement, a librarian will be invited to deliver a lecture or demonstrate at an appropriate time.

Tier 3- A series of seminars, workshops, colloquiums will be held for teaching staff.

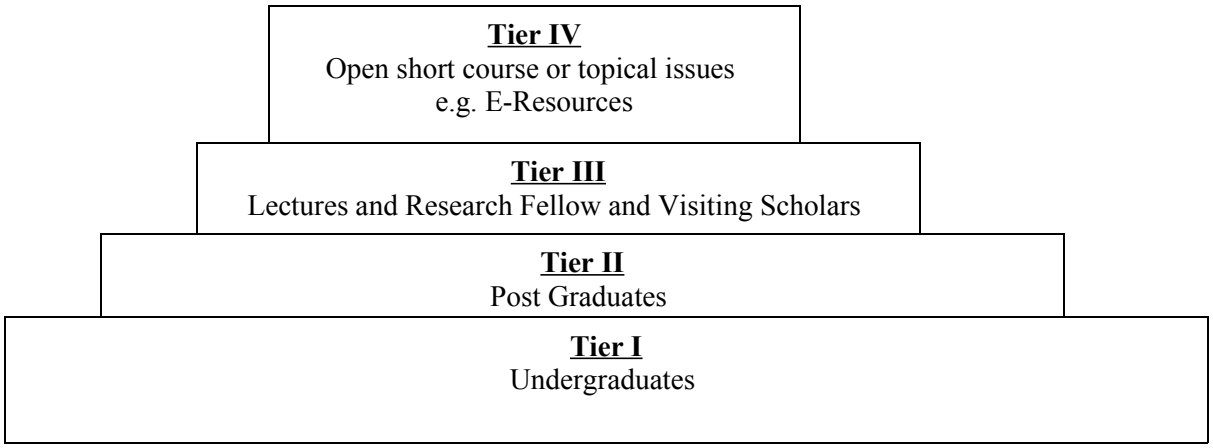
Tier 4- There will be lectures for visiting scholars, administrators and other non-teaching staff on topical issues when need arises.

Values of the model

The insinuations of higher learning will learn or benefit from the model. Other institutions may pick ideas of best practices from the model.

Figure 3 : Proposed Model for Implementation of IL Programmes in Universities in Kenya

Tiered information literacy model for universities



Critical Steps in implementation of IL initiatives

Every university should have an information literacy department which should be responsible for running the programmes within the universities and their constituent colleges. In order to succeed in the implementation of ideal information literacy programmes that reflect best practices, the researcher developed the following proposed model documents:

- Information literacy (IL) policy.
- Information literacy (IL) programme for undergraduate students.
- Information literacy (IL) course outline for post-graduate students.
- Information literacy (IL) course outline for teaching staff in universities.

Although some universities had wonderful syllabi on information literacy initiatives with clear goals and objectives, it is recommended that universities should plan and develop curricula through a systems approach as follows:

- A needs assessment to identify the client needs should be conducted
- A clear aim and objectives should be established
- Lobby for sustainable support and commitment from both faculty the top management of the university
- Training of library staff in pedagogical skills
- Develop assessment and evaluation criteria

Kenya Library Information Service Consortium (KLISC)

University libraries also face various challenges such as the inability by some to pay membership and subscription in time, and as a result, the services are disrupted. It was also reported that some publishers do not like the subscription by the consortium due to heavy subsidy e.g. engineering journals. At the same time some users felt there was a bias on selection of science and technology literature data bases. In order to keep information flowing to all universities, university librarians should convince the management of their parent organizations to fund e-journals kitty adequately so as to renew subscriptions in good time.

Institute of Information Literacy (IIL)

In order to reengineer information literacy programmes in our institutions of higher learning, it is necessary to create a body or institution that can initiate, develop and teach information literacy skills according to established standards and best practices. In this regard, the researcher recommends that an institute of information literacy (IIL) be established within our educational system to enhance integration of information literacy (IL) concepts to both individuals and institutions. The aim of the proposed institute would be to coordinate IL programmes at all levels of education in Kenya.

Marketing and publicity of IL initiatives

Marketing and publicity of IL initiatives was a big challenge in all the universities surveyed. To date very little in terms of promotion had taken place. Therefore there is need for both promotion and publicity of IL programmes to be enhanced.

Libraries are embracing change to respond to the needs of the new work environment. Therefore libraries should take orientation seriously by allowing only those with adequate knowledge and skills to address the freshmen. Since this is the first contact of freshmen with the library, it should be properly done so as to give a good impression on the students mind.

Collaboration between library and faculty

Partnership

In order for information literacy programmes to be successful, there is need for collaboration. In his regard, it is necessary to have the cooperation and support of all staff from within the department. While it is the responsibility of the library department to spearhead the IL initiatives both in planning and implementation stages, it is strongly recommended that the University management, faculty and library personnel engage in

collaborative partnerships for the success of the programme. There should be constant consultation of all the stakeholders especially the librarians, faculty and the administration.

Collaboration with faculty and administration

Collaboration with faculty and administration is critical; Have IL programmes as part of curriculum (examinable) and use made required course to be taught by libraries; Establish good relation and collaboration with other faculties for the purpose of evaluating and assessment; Motivate the teaching staff; Create facilities required for instruction.

Institute of Information Literacy

1. In order to initiate, develop and teach information literacy skills in our institutions of higher learning effectively, it is important that all stake-holders in information literacy have necessary knowledge and skills both in theory and practice. As a result, this researcher recommends that an institute of information literacy (ILL) be astablished within our educational system to enhance integration of IL concepts to both individuals and institutions. The aim of the institute would be to coordinate IL programmes in our country and also developcurriculum for the same.

2. One of the key roles would be to work with academics on the ways and means of embedding of information literacy in the curriculum.

3. It has been argued that the national body cannot facilitate provision of information literacy in universities due to the geographical distribution of universities. Therefore a department or a unit in individual universities and their constituent colleges would be more appropriate. There is need to improve the policy on IL that was published by CHE.

Operational Logistics

This includes the detailed planning of the the needed resources for the delivery of the programme, that is human, material and administrativ**e.** It is recommended that the total cost of the materials, equipment, human resources and other facilities needed should be included in the library budget for successful implementation of the information literacy programmes.

Promotion of information literacy programmes campus wide

The following promotional methods may be used:

- Information and communication technologies- Intranet, face book, twitters
- Library bulletin- A section should wholly be devoted to promotion in information literacy campus wide

- University newsletter- The officer incharge of information literacy should encourage library staff to write articles related to information literacy
- Institutional radio station- Issues for promotion of information should be enhanced. Foe example, Radio broadcasts on electronic resources, reading culture and plagiarism should be encouraged.

- **Learning Environment**

Adequate learning materials and equipment should be provided. This includes furniture like desks, tables, computers, white board markers etc.

- **Stand alone course**

It was also suggested that there should be a library skills course which should be a core course for all freshmen. The updated course should be separated from the communication skills course and take the same contact hours as other units at the universities in terms of theory, practical sessions and examinations. The majority of university librarians suggested a ratio of 60% for practical sessions and 40% for theory.
However there is need to streamline IL courses in both public and private universities. The Commission for Higher Education in Kenya should play a proactive role in this direction.

- **ICT and IL key informants**

They also emphasize holding seminars and workshops for trainers on a regular basis. The trainers are encouraged to read widely and engage in continuous research. In ADU regular trainings are held for the instructors. At the same time, conferences and symposia for the instructors are mandatory.

- **Effectiveness of IL staff**

It was agreed by the respondents that there is need for training of the staff involved in IL initiatives. This is best achieved through regular seminars, workshops, and symposia or what is commonly referred to as academic development programmes (ADU).

SUGGESTIONS FOR FURTHER RESEARCH

- This study was conducted principally in universities in Nairobi. Similar studies should be undertaken in universities located outside Nairobi.
- That specific studies addressing provision of IL programmes to different categories of users in universities

Arising from the research findings, it was realized that post graduate students and the teaching staff have problems almost similar to those of the under-graduate students. Therefore there is need to do similar studies to investigate the impact of IL programmes to other stakeholders in the institutions of higher learning. Further research should be undertaken to streamline IL programmes for the following:-

- Post-graduate students
- Teaching staff
- Visiting scholars and non-teaching staff

- **Post-graduate students**

Since post graduate students and the teaching staff face challenges in accessing and using both printed and electronic resources, there is need to spend some energy towards this direction. A similar study should be undertaken to re-engineer IL programmes at the post-graduate level.

- **Teaching Staff**

There is need to focus research on teaching of IL programmes so as to find out their impact on students. It is also necessary to find out the most appropriate teaching methods and how these methods can be improved. Even the teaching programme should be evaluated regularly.

- **Visiting scholars and non-teaching staff**

University libraries have a responsibility of serving not only the key stakeholders but also other users like visiting scholars and other members of the community involved in serious research. Similarly such users should have an opportunity of accessing both printed and electronic resources. This can effectively be done if there is a formal curriculum geared towards meeting the expected needs of visiting scholars and the non-teaching staff.

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