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INFORMATION SEEKING BEHAVIOUR OF COMPUTER SCIENCE STUDENTS IN KENYA: CASE OF CHUKA UNIVERSITY

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ABSTRACT

Information centers such as libraries and research centers offer various services to their clients. This calls for a shift by information professionals from common daily activities and focus on the information needs of their clients. Computer scientists are very resourceful and contribute to the sustainability of the society. The computer scientist creates networks where people can acquire, use and manage Information Technology through innovations and social networks. This is an indication that Computer scientists have potentials, which can provide the drive needed for achieving the Sustainable Development Goals (SDG). The objectives of the study were: 1) Determine the information needs of computer science students at Chuka University. 2) Identify the information sources they consult 3). Find out problems the students face while seeking information. Descriptive design was used for the study. Stratified random sampling was used to select 50 students studying computer Science at Chuka University. A questionnaire was used for data collection. Data analysis was carried out using the statistical packages for social science (SPSS). They sought information mainly for preparing for examinations and assignments. Among the main information sources used were the Internet, friends, lecturers and books. Few used journal articles. Some of the challenges they highlighted include difficulty accessing some websites and failed connections to databases. The library should make more effort to reach out to the computer science students to encourage them to ask for help while seeking for information.

Keywords: *Library, Information needs, databases, computer scientists, ICT*

INTRODUCTION

Information is an important resource for a student's academic and social achievements. Therefore knowledge about their information seeking behavior is crucial to effectively satisfy their information needs. In order to effectively fulfill their information needs, an understanding of the kind of information they require and the types of information sources they can utilize to fulfill these needs is important. According to Shakeel and Vinayagamoorthy (2013), Information seeking behavior can be described as an individual's way and manner of gathering and sourcing for information for personal use, knowledge updating and development. However the internet has affected student's behavior while seeking information. Nadzir and Salim (2013) state that information seeking behavior should start by identifying the information needed then selecting the suitable information sources. However some students are unfamiliar with this approach as a result their information needs are not adequately met.

Aim of the Study

The library is an important part of the academic world. Changes in the information environment have resulted in the traditional libraries being converted to digital libraries. The phenomenal growth in ICT technology has forced organizations to build library e-resources. This study examined the information seeking behavior of computer science students in Kenya, a case of Chuka University. Computer scientists are very resourceful and contribute to the sustainability of the society. They create networks where people can acquire, use and manage IT through innovations and social networks. This is an indication that Computer scientists have potentials, which can provide the drive needed for achieving the Sustainable Development Goals (SDG). The study aimed at determining their information needs and the sources of information they consulted. It adopted a descriptive survey design and data was collected using a questionnaire administered to 50 respondents. Research has been carried out on information seeking behaviour, but none on the information seeking behaviour of computer science students in Chuka, Kenya.

Objectives of the Study

- 1) Determine the information needs of computer science students at Chuka University.
- 2) Identify the information sources they consult
- 3) Find out problems the students face while seeking information.

LITERATURE REVIEW

Ingwersen (1995) defines information as being the result of transformation of the generator's cognitive structures. To make use of information there has to be a need. Case (2012) states that information need is the recognition that your knowledge is inadequate to satisfy a goal that you have. Information need as defined by Dervin and Nilan, (1986) is a gap in individual's knowledge in sense making situations. As the need arises an individual is forced to seek information. Borgman et al. (2005) argue that information seeking includes an individual's recognition of a knowledge gap or a state of knowledge that instigates the pursuit of information. This results in information seeking behavior which is According to Wilson (2000), the purposive seeking for information as a consequence of a need to satisfy some goal. In the course of seeking, the individual may interact with manual information systems. Williamson et al. (2007) state their Information seeking behavior includes information needs, the use of information sources to retrieve information and ends with the use of the retrieved information. For the purpose of the study, Williamson's definition will be used to refer to the behavior of computer science students at Chuka University while seeking information to fulfill their needs. This refers to the process of identifying needed information, using the preferred sources of information to search for the needed information and using the acquired information to fulfill their information needs.

A study by Ajiboye and Tella (2007) -examined the information seeking behavior of University undergraduate and its implications for quality in higher education in Africa. The study showed that academic information was the student's main information needs. The study revealed that the most crucial source of the academic information was the Internet. A survey by Kerins, Madden and Fulton (2004) on engineering and law students' information seeking behavior revealed that the internet was the first source of information they used. Kakai, Ikoja-Odongo and Kigongo-Bukenya (2004), in their study on the information seeking behavior of undergraduate students of Makerere University, Uganda revealed that the students main information need information to help them in their course works and assignments.

METHODOLOGY

This study adopts quantitative data approach to information seeking behaviour, using survey method as the primary tool for data collection. Questionnaires were distributed to 50 computer science students. Data analysis was done using the Statistical Packages for Social Science (SPSS).

RESULTS AND DISCUSSION

Frequency of Library Visits

Respondents were asked whether they visit the library. Significant variance was evident, in term of how frequently the computer science students visited the library. as shown in table 1 majority of the respondents (21; 42%) visited the library 2-3 times in a week while (14; 28%) visited the library once or twice in a month further, it shows that (7; 14%) of the respondents visited the library daily. Respondents who visited the library once or twice a year are equal to those who visited several times a year.

Information Needs

The types of information needed by the computer science students were identified based on analysis of the feedback from the questionnaire. Finding out the student's information needs gives essential information that would help the librarians in developing the library collection as well as the services and facilities to provide better service to them.

Table 1: Frequency of library visits

Frequency	Respondents	Percentages
Daily	7	14%
2-3 times in a week	21	42%
Once or twice in a month	14	28%
Once or twice a year	4	8%
Several times a year	4	8%

As shown in Table 2, 44% of the considered information to assist them in their assignments as the most important information. On the other hand, the type of information that received the lowest percentage and is considered less important by the students is information on personal health. Only 4% of the students responded that the information is very important for them in order to carry out their research project. One explanation for these findings might be related to the daily activities they are involved in. Since their main activity is studying, computer science students might spend more time looking for information on how to do their assignments hence perceive that this information is important.

Table 2: Computer science student's information needs

Information needed	Respondents	Percentage
Research work	7	14
Current affairs	6	12
Information for assignments	22	44
Industrial attachments/employment	7	14
Sports/entertainment information	6	12
Personal health	2	4

Computer Science Students' Information Seeking Behaviour

Information source format preferred

The respondents were asked the information source formats they preferred. The findings of this study revealed most of them (95%) prefer to use electronic information sources to search information. The computer science Students prefers electronic information sources because of its convenience and availability of up to date information.

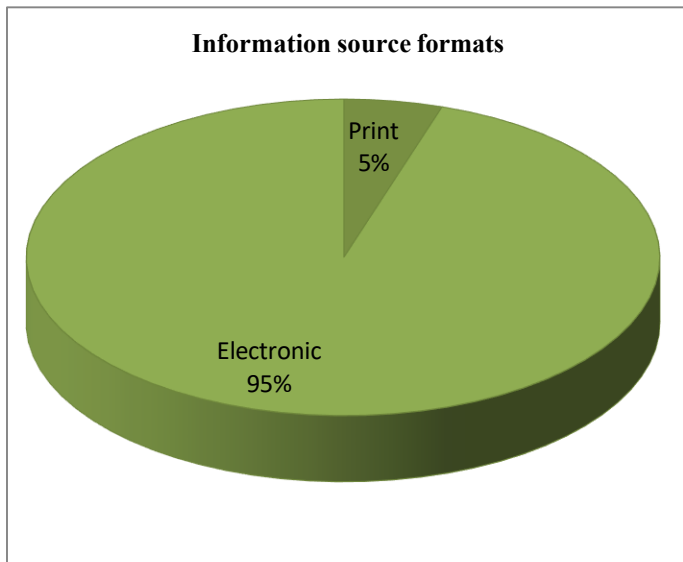


Figure 1: Preferred information source formats

Preferred sources of information used by the computer science students

The respondents were also asked about their preferred sources of information. The figure 3 below shows that the internet was the most preferred information source. The students preferred to use the internet because of its accessibility and ease of use. 26% of the respondents used the internet facilities while 24% of the respondents used lecture notes and handouts. Further, the respondents who prefer the university library are equal to those who prefer the library staff. 8% of the students find it easier to get the required information by discussing with their colleagues and 10% of the students use the lecturers their information source. The findings of the study support a study by Brown and Swan (2007) where they noted that the number of researchers visiting libraries has declined since 2001, they depend on the library's website or search engines to acquire the information they need. Therefore the library should make more effort to reach out to the computer science students; this would draw the students closer to them and encourage them to ask for their help while seeking for information

Table3: The most preferred information sources

Information sources	Respondents	Percentage
Lecture notes and handouts	12	24
University library	8	16
Internet	13	26
Consulting colleagues	4	8
Lecturers	5	10
Library staff	8	16

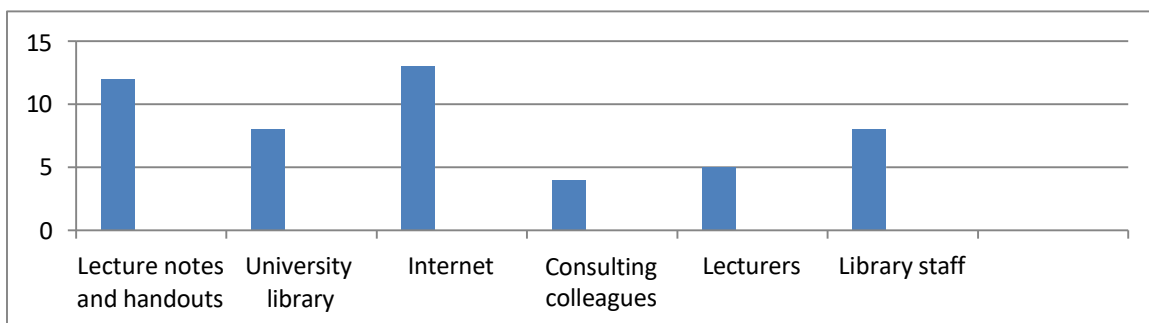


Figure 2: The most preferred information sources

Challenges faced while seeking information

Table 4 indicates that the most challenging situation for the respondents while seeking is when the needed information materials are not available at library. As shown in the table, 40% of the computer

science students responded that it is a challenge when the needed materials are not available. The least challenging information seeking situation is when the information they need is scattered in too many sources. The finding is similar with Singh and Kumari (2013) who reported that the major problem students face while searching for information is the unavailability of required materials in the library.

Table 4: Challenges faced by computer science students while seeking information

Information sources	Respondents	Percentage
Unavailability of needed materials	20	40
Information scattered in too many sources	1	2
Inadequate knowledge of use of catalogue	5	10
Lack of time to access the information resources	10	20
Inadequate qualified librarians	2	4
Non- cooperating library staff	3	6
Lack of knowledge in using library resources	6	12
I don't know how to identify relevant information sources	3	6

Possible solutions to information seeking problems

The respondents were asked to share their suggestions on ways to address the problems presented in Table 4 above. Table 5 shows the responses received.

Table 5: Suggestions on ways to address the problems

Responses	Frequencies
Relevant materials in library	22
Change in library staff attitude	2
Protection of library information materials	1
Training in the use of catalogue	2
Convenient library environment	2
Provision of computers and internet	18
Improved power supply/general lightings	3
Total	50

CONCLUSION AND RECOMMENDATIONS

In this study, information seeking behaviour comprised of identifying the information needs of computer science students at Chuka University, finding the required information using information sources and using the retrieved information with the intention of fulfilling their needs.

- The findings of this study revealed that information for completing their assignments was the most important information needed by the computer science.
- While searching for the required information, the students prefer the internet due to its availability and ease of use.
- The study also found out that the unavailability of the needed information materials is the major problem that the students face while seeking information.
- Some of the possible solutions to the challenges noted in the study include, provision of relevant materials in the library, provision of modern library facilities and provision of computers and internet.
- The findings of this study could encourage further research on the computer science student's information seeking behaviour in the electronic environment.
- The findings can also be used by librarians to develop collections that would meet the computer science student's information needs.
- Investment in ICT infrastructure e.g. increases in bandwidth is necessary in order to increase access and use of information resources by the students.
- A detailed analysis can be taken to identify the factors influencing the computer science students' behaviour in seeking information for a research project.

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