INFORMATION SEEKING BEHAVIOUR OF DISTANCE LEARNING STUDENTS: A CASE STUDY OF THE OPEN UNIVERSITY OF TANZANIA, ARUSHA REGION

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Abstract

This study examined the information seeking behaviour of undergraduate distance learning students of the Open University of Tanzania (OUT). The study was carried out in Arusha region, one of the OUT centres in Tanzania. Data were collected mainly through questionnaires, which were distributed to 60 students, supplemented by interviews with two OUT teaching staff and one public librarian, Focus Group Discussion with six students, as well as participant observation. The Statistical Package and Service Solution (SPSS) was used to analyse quantitative data, whereas qualitative data was subjected to content analysis. The findings reveal that, although respondents used mostly textbooks, there was a shortage of relevant and current textbooks in Arusha Public Library. The study also established that not all the respondents used the Internet, mainly due to lack of access, low bandwidth, lack of requisite search skills and lack of librarian support in effective use of the Internet. This limited use of information problem was compounded by time and geographical barriers. On the basis of these findings, he study recommends the provision of Internet access at the Arusha Public Library, equipping the library with relevant resources in both print and electronic formats for OUT students, prioritising awareness creation on scholarly online e-resources available as well as organising information literacy programmes.

1. **Keywords**: Information seeking behaviour, distance education, distance learning students, Open University of Tanzania (OUT).
2. **Article Classification**: Research paper

Introduction

Distance learning plays a key role in the provision of access to education to large numbers of people who had previously been denied such opportunities in conventional educational institutions. It also provides educational opportunities to working people as it eliminates the need for them to take study leave, which for many working potential students tends to act as a barrier. Developments that made it possible to provide distance learning at tertiary level encouraged an increasing number of universities, in both developed and developing countries, to offer distance learning programmes and thus expand educational opportunities by increasing access to education to a large number of people including the disadvantaged segments of society hitherto isolated geographically in a cost-effective way.

In Tanzania, public universities have been failing to meet the demand for higher education, a situation which continued despite the accreditation of many private universities and the provision of university status for some public colleges and institutes that previously used to offer diplomas and certificates. In a bid to ensure a more lasting solution, the Open University of Tanzania (OUT) was established in 1993 under Act No. 17 as the only degree offering Open Distance Learning institution of Higher Education in Tanzania. Ever since, OUT has been a leading university in Tanzania with the highest number of matriculated students compared with other conventional universities in the country, with more than a quarter of them being female, hence signifying its significance in providing access to tertiary education particularly to the often disadvantaged female students.

In ensuring the success of education and more specifically distance learning, effective information resources provision is paramount. And yet, the provision of information resources to distance learning students in developing countries has often been problematic. This problem results into students' failure to meet their information needs, which in turn negatively affects the quality of learning. Indeed, poor access to information resources is a key factor behind the low graduation rates at the Open University of Tanzania (OUT, 2011). On the whole, for distance education to be effective, the information seeking behaviour of users needs to be identified to enable information professionals to develop appropriate information services in support of distance learners. This was the thrust behind this study. The paper, therefore, provides insights

into the current situation and also proposes the way forward based on the data that was collected from the field.

Background to Distance Education in Tanzania

In Tanzania, distance education programmes were first introduced in the 1940s by foreign institutions, specifically the British Tutorial College, Rapid Results College and International Correspondence Schools (ICS), which used to enrol and offer vocational and academic courses in urban centres through correspondence, hence lacking face-to-face contacts between learners and the tutors (Mahai, 2008). In the 1970s, the Institute of Adult Education (IAE) was established under Act No. 12 of 1975 to provide foundational and continuing education courses that targeted primary school leavers, dropout workers who wanted to upgrade their levels of education and junior secondary school leavers preparing for "A" level national examinations, under the Distance Education Department (DED), commonly known as the National Correspondence Institute (NCI).

Subsequently, the establishment of the Open University of Tanzania (OUT) as a fully fledged and accredited public institution of higher learning was a landmark in the provision of distance learning at the university level in the country. Operating through a network of 29 Regional centres, eight co-ordinating centres and 69 study centres, OUT has spread its tentacles throughout the United Republic of Tanzania, including the Zanzibar archipelago. In fact, its operations extend even farther into neighbouring countries such as Kenya, Rwanda, Malawi, Uganda, and Namibia.

The Open University of Tanzania embraces Open and Distance Learning (ODL) mode blended with face-to-face sessions, hence infusing flexibility in learning. The university has also been taking advantage of the developments in Information and Communication Technology (ICT) to enhance the quality of teaching and learning.

Theoretical Framework

Wilson (1999) developed a model to explain information seeking behaviour. Under this model, the information seeking process begins when a user perceives an information need, which—

according to Devadason and Lingam (1996)—represents a gap in the current knowledge of the user. To satisfy this need, the user will have to interact with both informal and formal information sources and services, an interaction which results into success or failure in retrieving the required information (Wilson, 1999). If successful, the individual uses the information, and realises that the need has either been fully or partially met or not met at all. When the latter scenario results, then the search process will begin until the information gap has been filled. According to Wilson, information seeking behaviour may partially involve other people through information exchange. Moreover, useful information may be passed on to other people as well for them to use it.

Methodology

The study was conducted in Arusha, which is one of the regions in Tanzania with highest OUT student enrolment. The main method of data collection was the questionnaire which was initially administered with 70 students, who were selected through systematic sampling, a technique which was used to ensure that students from all major undergraduate degree programmes were included in the sample. Out of the 70 questionnaires distributed, only 60 were returned, hence a response rate of 85.7 percent. The questionnaire was supplemented by interviews conducted with two OUT teaching staff and a public librarian in Arusha region, who were purposively selected on the basis of their strategic placement in OUT Arusha centre and Arusha Public Library, respectively. Other methods used were Focus Group Discussion, which involved six students, as well as observation method which was conducted in the public library and computer laboratory. Statistical Package and Service Solution (SPSS) Version 16 was used to analyse quantitative data whereas qualitative data was subjected to content analysis.

Presentation and Discussion of Findings

Socio-economic Profile of Respondents

The following subsections provide social and demographic characteristics of the respondents, that is, information related to gender, age, marital status, degree programme pursued, year of study, as well as source of income:

- **Gender:** Of the 60 students respondents who filled and returned the questionnaires, 33 (55.0%) were male whereas 27 (45.0%) were female, implying representativeness of both male and female student respondents.

- **Age:** Twelve (20.0%) of the respondents were aged less than 30 years, 28 (46.7%) between 30 and 39, and 16 (26.7%) between 40 and 49. Another four (6.7%) were aged 50 years and above. The majority of the respondents, therefore, were aged between 30 and 39.

- **Marital status:** The majority of the respondents (32 or 53.3%) were married. Fewer respondents were either single (24 or 40.0%) or widowed (4 or 6.7%).

- **Degree programmes pursued:** There was an almost equal representation of the respondents in the major undergraduate degree programmes offered at the Open University of Tanzania, that is, Bachelor of Education (14 or 23.3%), Bachelor of Arts (13 or 21.7%), Bachelor of Business Administration (12 or 20.0%), Bachelor of Science (9 or 15.0%), Bachelor of Law (7 or 11.7%) and Bachelor of Commerce (5 or 8.3%).

- **Year of study:** The sample was not evenly distributed, as four (6.7%) respondents were first years, 20 (33.3%) were second years, 21 (35.0%) were third years, and 15 (25.0%) were fourth years and above. The degree programmes vary between three and five years of study although the flexibility of distance learning allows students more than five years of study.

- **Main Source of Income:** Findings show that 49 (81.7%) respondents mentioned employment, eight (13.3%) mentioned business activities whereas three (5.0%) mentioned no source of income. The main source of income for the majority of respondents is employment whereas a few were engaged in business activities or had no source of income at all. As OUT students have to meet all their education costs by themselves, they are usually workers, with family and other commitments. Those without any source of income may be getting support from relatives, friends or some other benefactors.

Use of the Library

Libraries are important points for students, including those studying through distance learning, to access various resources to support their learning. The respondents were asked to indicate whether they use libraries. The findings revealed that that 55 (91.7%) of the respondents used a library whereas three (5%) did not use one. Two (3.3%) respondents did not respond.

- Major reasons for library non-use (N=5) given as multi-response are as follows: long distance to the library (5 or 100%), lack of time to access the library (3 or 60%), lack of relevant and up-to-date reading materials in the library (54.5%), as well as inconvenient library operating hours (2 or 40%).

- Mcharazo (2000) reiterates that lack of requisite reading materials is prevalent in many libraries in Tanzania to such an extent that library users find themselves having to use other sources of information and some quitting to use libraries altogether. Despite these shortcomings, many users persistently keep on using the library, as echoed by one focus group participant:

    > I can generally say that I am satisfied with library services, because I have been doing very well in my tests and final examinations. Being a regular library user, I believe the library has made a good contribution to that end regardless of many shortcomings…

- The problem of long distances to the library is a major impediment for distance learners in developing countries such as Tanzania. The finding corroborates with Boadi and Letsolo (2004) who observed that long distance limits the students' access to library and information sources and services, hence causing them to rely on informal sources, which were not necessarily the best sources in meeting their information needs. As the public library network that OUT students can access centred mainly at the regional headquarters, those students living in far away districts face problems in accessing library services. This was reiterated by one student during focus group discussion:

    > I never plan a trip to town to access the library because of uncertainty of getting what I need and the library is too far away. I visit the library accidentally, only when I have a business or official trip to town.

- Inconvenient library operating hours, as mentioned by some respondents, can be explained by the fact that adult learners are normally employed and so working hours may be in conflict or fail to tally with the library operating hours. As such, the free time available which is the evening for the working student is also the time when the library is closed.

- The finding on lack of time to visit the library corroborates with the findings by Mabawonku (2004), who reported that lack of time to use the library and lack of library use

instructions hampered its effective use by distance learning students in Nigerian universities.

Type of Library Used

Respondents were asked to indicate the type of library that they used. The findings, as multi-responses, are presented in Table 1:

Table 1: Type of Library Used (N=60)

Response	Frequency	Percentage
Public Library	50	88.3
Academic Library	28	46.7
Learning Resource Centre	25	41.7
Special Library	9	13.3
Other	3	5

The responses show that the majority of the respondents (88.3%) used public libraries, whereas others used academic libraries (46.7%), Learning Resource Centres (41.7%) or special libraries (13.3%). Those who indicated "Other" (5%) mentioned "Special Collections".

The public library was the mostly widely used type of library among the respondents primarily because of the presence of a special collection at the Arusha Public Library with leaning resources to support OUT students. During an interview, the Regional Centre Director said that public libraries in all the regions stocked learning resources that supported the OUT curriculum, thanks to arrangements between OUT and the countrywide library network under the Tanzania Library Services Board (TLSB).

However, there were bottlenecks such as lack of relevant and up-to-date materials in those libraries (Mcharazo and Olden, 2000), as well as geographical barriers, which resulted into their under-utilisation. Failure of the public libraries to cater for the needs of OUT students has made it necessary for OUT students to use other types of libraries, specifically academic and special

libraries. In Arusha, for example, there are a number of institutions, which allow OUT students free access to their library collections. These institutions include International Criminal Tribunal for Rwanda (ICTR), Makumira University, Mount Meru University, Arusha Institute of Accountancy (AIA), and the Institute of Social Work - Tengeru.

A reasonable number of respondents (41.7%) mentioned the Learning Resource Centre (LRC). This source is based at the OUT regional centre. It is stocked with study materials and several textbook copies for students. However, during interview with OUT teaching staff, it was established that its usage was limited due to the small size of the collection, lack of library staff and lack of a catalogue.

The findings also show that few respondents indicated using "personal collections". Some bookshops and roadside book stalls may contain textbooks, which are valuable for academic purposes in a number of disciplines. Moreover, some students can buy them to support their learning. However, getting suitable titles is by chance and also the prices of many textbooks sold tend to be too high for many students to afford.

Preferred Method of Locating Information in the Library
Respondents were further asked to indicate their preferred method of locating information in the Library. The findings show that the respondents used a number of ways: browsing the shelves (53 or 88.3%), consulting a librarian (46 or 76.7%), consulting colleagues (44 or 73.3%), browsing through the card catalogue (47 or 78.3%), as well as using the OPAC (16 or 26.7%).

The respondents, therefore, predominantly preferred browsing through the shelves as their major technique in locating information in the library. During focus group discussion with student respondents, one participant said:

> I prefer browsing the shelves to save time because relevant reading materials are
> unavailable in the library, and so checking their availability through the catalogue
> is a wastage of time.

Another participant said that it was preferable to browse the shelves to locate accidentally any textbook that may be useful for academic or other purposes.

A study by Rajabu (2003) also revealed that browsing the shelves was a major method deployed by students in locating materials in a library. However, the use of this method in locating library materials tends to be more time-consuming than the use of either the card catalogue or OPAC, and thus students should be encouraged to use catalogues to save much of their time. Those who mentioned the OPAC could be accessing it at some other library because no such catalogue existed at the Arusha Regional Library.

Other Sources Used by the Respondents

The respondents were required to indicate other sources of information that they used. The findings are presented in Table 2:

Table 2: Other Sources of Information Used (N=60)

Response	Frequency	Percentage
Textbooks	59	98.3
Internet	54	90.0
Study materials	56	93.3
Colleagues	52	86.7
Lecturers	37	61.7
Journal articles	24	40.0
Newspapers and magazines	6	10.0

Findings reveal a number of other sources of information the respondents used. Of these sources, textbooks rank highest, followed by study materials, colleagues, lecturers, journal articles, newspapers/magazines and research reports. Although textbook use predominates, there has generally been a shortage of current, relevant and up-to-date textbooks in Tanzania's public libraries. According to Mcharazo (2000), lack of requisite reading materials in many libraries in Tanzania has resulted into users resorting to other sources of information and some even quitting using libraries altogether.

In fact, the majority of the respondents indicated using the Internet. The Internet has nowadays become an invaluable source of information because many libraries specifically in developing countries have to contend with limited availability of timely, current and relevant print materials for use by the users. The importance of the Internet has also been emphasised by George *et al.* (2006) who found that the majority of the students at Carnegie Mellon University searched the Internet as the first call point when looking for something and consulted other sources such as the library only after they get the information they need.

However, in the current study it was observed that there were no computers, let alone internet connectivity at the Arusha Regional Library, which impedes access to e-resources as well as offering of internet search training. Although there was a computer laboratory at the OUT Arusha regional centre where OUT students could access the Internet, it was underutilised due to students' lack of search skills as well as unawareness of scholarly resources available online, as indicated by student respondents during Focus Group Discussion. This problem was compounded by time and geographical factors as well as limited bandwidth.

Findings also show low use of journal articles by the respondents. Limited use of journal articles by the respondents can be explained by unavailability or limited availability of print journals in public libraries because acquisition priority is given to textbooks. Indeed, observation by the researcher at the Arusha Public Library revealed absence of print journals.

The study findings also show that the majority of the respondents mentioned colleagues and lecturers as their sources of information. During the Focus group discussion, one participants said that when students needed information to complete an assignment, they consulted other students to know whether they had any idea about where and how to get information related to a particular assignment. Another FGD participant said that OUT students preferred to consult lecturers because they are well-informed and so they could provide guidance to students on where and how to get particular assignment-related materials. He further explained that consultation with lecturers was, however, limited by geographical and time barriers peculiar to distance learning.

The findings also show that few respondents use newspapers and magazines. Although these are important sources of information, dwindling library budgets have been limiting the number of titles that can be acquired in addition to contributing to the irregularity in their acquisition, which limited their access by library users (Manda, 2002).

Personal observation by the researcher in the Arusha Public Library affirmed the availability of a few copies of outdated international magazines and some local Kiswahili newspapers. The Internet's presence, however, has increased access to newspapers and magazines since major publishers, both local and international, make their copies available online which may eliminate the need to buy printed copies.

Conclusion and Recommendations
Conclusion

The findings reveal that undergraduate distance learning students faced problems with regard to access to and use of information resources. They relied mostly on print sources of information despite their availability or adequacy being problematic. They faced problems of proximity to library services as well as library opening hours. Their use of the Internet was also limited due to inadequate infrastructure and access facilities. Furthermore, there was also problems related to awareness of online resources that can benefit them, as well as lack of skills for effective search on the Internet. In spite of the benefits that accrue from using the Internet, the findings have shown that there were some respondents who did not indicate the Internet as their source of information. This resulted was unexpected for students studying at institutions of higher learning, and particularly the Open University of Tanzania who learn largely through ODL.

Based on the study findings, the study recommends that access to and use of information resources by distance learning students needs to be improved through the provision of access to both print and electronic resources to minimise the gap between students pursuing their studies through distance learning and those in conventional tertiary distance learning institutions. In fact, many libraries worldwide are integrating the Internet in their operations including providing access to library users to a wide range of electronic sources of information. In this regard, Oladokun (2002) has emphasised embracing the latest information technology in providing

library and information services to learners so that the entire collection of library becomes accessible through the Internet to the learners. There is a need, therefore, for OUT to prioritise making the entire collection at the OUT Main Library in Dar es Salaam available online for universal access for OUT students, and hence eliminate geographical and time barriers. This measure could also minimise the gap between distance education learners and their on-campus counterparts in terms of accessing learning resources. Towards this end, the issue of sustainability should be given priority, since rapid technological change tends to render in no time hardware such as computers obsolete and incompatible with conventional software. This is particularly important as distance learning enrolment is on the increase while access to print sources of information remains stagnant, thus failing to match the needs of increasing student enrolment.

Recommendations

Based on the findings, the study makes the following recommendations:

- Equipping public libraries with relevant, adequate and up-to-date reading materials to meet the learning resource needs of tertiary distance learning students. Resource sharing among libraries across the country should also be encouraged.
- Equipping public libraries with Internet-connected computers for use by distance learning students and others. The availability of such computers could facilitate access and use of e-resources to supplement print resources. Resource sharing will also become possible through e-resource sharing and learning.
- Internet connectivity for information users including tertiary distance learning students should not only be guaranteed but also be. sustainable in terms of availability of the supportive ICT facilities and associated services.
- Increasing awareness of available online resources that are useful academically. This will become more meaningful if public libraries are equipped with computers with Internet connectivity to enable librarians to foster online marketing skills.
- Employment of qualified library staff to manage public libraries. ICT staff at the regional centre computer laboratory should have ample and updated skills in librarianship to enable them to assist distance learners in accessing scholarly online databases as well as equip users with information search skills.

- Digitisation of OUT local contents and making it available online so that OUT students in all regions across the country may access them to minimise the need for upcountry students to travel to the OUT library in Dar es Salaam search of indispensable documents.
- Teaching staff should encourage distance learning students to use internet sources in support of their assignments. In this regard, resistance to change should be overcome.

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