Libri ISSN 0024-2667

The Provision of Library and Information Services to Distance Learners: The Open University of Tanzania (OUT)

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This paper presents the findings of research conducted on the provision of information services to distance learners by the Open University of Tanzania (OUT). The objective of the research was to discover how the Open University of Tanzania provides library and information services to its distance learners and the extent to which these services meet the needs of the learners. The study was done with a view to suggesting ways in which information provision at OUT could be improved. Data collection was done in the Dar es Salaam and Mwanza regions where a total number of 190 re-

spondents were involved in the survey. Findings of the study reveal that the Open University of Tanzania has problems in meeting the information needs of its staff and students. The Main library does not have adequate resources while OUT Information Units at Regional Centres and Tanzania Library Services are poorly stocked. In addition, the few materials that are available do not reflect the curriculum. As a way of alleviating the problem, OUT students use the library services of other nearby institutions. Recommendations to improve the situation are given at the conclusion.

Introduction

Since the early 1980s, Tanzania has experienced increased demand for higher education. In 1990, the country had only two conventional universities, namely the University of Dar es Salaam (UDSM) and Sokoine University of Agriculture (SUA). In order to meet the demand, the government decided to shift from the traditional system of education to distance education through an open university. This is an equivalent educational system, which is not actually less expensive, but has some economies. The system also provides a second chance to apply for university education to those who were not selected by the conventional system immediately after completion of secondary education.

The Open University of Tanzania (OUT) was established by an Act of Parliament in 1992, and officially launched in 1994. The introduction of OUT

was based on the need to expand higher education, considering the large amount of secondary school output each year and the limited number of places in the existing universities. So far, OUT is the only single mode of institution offering degree courses through a distance learning system in Tanzania. Since 1994, distance education has been an integral part of higher education system in Tanzania.

OUT offers degree courses in the following areas: arts, commerce, science, law and education. The first intake of 763 students was in 1994, and the first graduation was in the year 2000. Open University statistics show that a total of 4,809 students had enrolled in the University by the year 1998. About 88% of these were males and the remaining 12% were female. Higher education in Tanzania is male dominated due to historical and cultural reasons.

According to Mcharazo (2000), law is the most popular subject taken by 30% of the students.

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Education is the second in popularity. Many students have a teaching background and go to the university to upgrade their qualifications. Others include administrative staff employed by the government and parastatal organisations, magistrates, accountants, technicians and businessmen.

The courses are conducted through the distance learning system by means of correspondence, organised seminars and contact programmes. There are established Regional Centres where students are provided with tutoring and counselling services. The OUT headquarters is located at Kinondoni area in Dar es Salaam City.

Objectives of the study

The broad objective of this study was to examine the way library and information services are provided at the Open University of Tanzania and the extent to which these services meet the information needs of its users. More specifically, the study had the following objectives:

- To examine the status of the OUT Main library at the headquarters and the manner in which it developed to cater for the information needs of distant learners.
- ii. To assess the information support units at the Regional Centres and the Tanzania Library Service branches and the way they provide information for distance learning.
- iii. To investigate the way the orientation programme for new students is conducted with reference to preparing them to use various information services.
- iv. To find out if student drop—outs can be attributed to a lack of adequate information services.

Research methods

The methodologies used to choose the study area, sampling and data collection were as follows:

(i) Study area

Tanzania is a vast country. Due to financial and time constraints, two regions, namely Dar es Salaam and Mwanza, were selected for the study. Dar es Salaam is the capital city of Tanzania. It was purposely selected to represent the urban environment where the information infrastructure is relatively well developed as compared to other regions. There are many institutions that provide

information relevant to university students and a wide range of facilities that distance learners can access.

The Mwanza region constitutes both urban and rural environments. Mwanza town is urban while the Magu, Ukerewe, Kwimba, Geita and Sengerema districts are all rural-based. These constitute a remote rural environment comprised of information disadvantaged groups.

(ii) Population and sample

In this study, the population consisted of all OUT academic staff and students based in the Dar es Salaam and Mwanza regions. In order to obtain the sample, the study employed a combination of purposive, random and snowball sampling techniques to obtain the sample that provided information to represent the population. 190 respondents were involved in the study. These can be grouped as follows:

- i. There were 140 active students. 91 were from Dar es Salaam and 49 were from Mwanza. There were only 26 females out of the 140 respondents, 6 from Mwanza and 20 from Dar es Salaam.
- ii. Non Active/Drop outs: These were 36, 14 from Dar es Salaam and 22 from Mwanza. Females numbered 24. Again, this shows that the few females that join OUT are much more vulnerable to dropping out than males.
- iii. Six full time tutors were involved in the study. These are the ones who conduct face-to-face tutorials in their respective subject areas and mark student assignments.
- iv. Senior University Officials were the Vice Chancellor (VC) and The Deputy Vice Chancellor (DVC), who is responsible for all academic matters (including Library services) and the Registrar who is concerned with administrative matters.
- v.There were also two Regional Coordinators, one from Dar es Salaam and the other from Mwanza.
- vi. Three librarians were also involved in the study to help understand the status of library collections. One was from the headquarters and the other two were from the Tanzania Library Services regional branches of Dar es Salaam and Mwanza.

(iii) Data collection techniques

Four main techniques of data collection were used in this study: questionnaires, interviews, observations and documentary sources of information.

(a) Questionnaires

Different sets of questionnaires were developed for different groups of respondents. They included a combination of closed and open-ended questions. The questionnaires were made to reveal the availability and adequacy (or otherwise) of information provision and other support services to OUT students.

(b) Interviews

Interviews were conducted with all respondent groups. With the students, the interview was intended to countercheck and supplement information obtained through the questionnaire. With the Senior University Officials the interview was the best approach since it provides room for dialogue and results in a higher response rate. Interview schedules were prepared to help guide the semi-structured interviewing process.

(c) Observations

On-site observations were made concurrently with the interviews in order to obtain supplementary data. Garland (1993) advocates observations for understanding patterns of what is observed and also for revealing what the respondents would otherwise not have liked to point out.

In this study, observation was held during the new students orientation programme held in January 2001. OUT materials placed at the Tanzania Library Services Mwanza and Dar es Salaam branches were also reviewed. In addition, there was an observation of the OUT library at the headquarters. The observations were followed with discussions with the responsible tutors/librarians.

(d) Documentary sources

Documentary analysis was made on a number of publications produced for OUT. Documents of interest were found to be: the 1992 OUT Act; OUT circulars; library annual reports, OUT prospectus and newsletters, and the library guide.

Findings of the study

Established systems of information provision

An interview with the librarian of the Open University revealed that in order to meet information needs of its academic staff and students, the

Open University of Tanzania has established a system of information provision as follows:

- It has a Main Library that is located at the headquarters in Dar es Salaam. This provides library and information services to staff and students residing in Dar es Salaam.
- ii. In those regions where there are branches of the Tanzania Library Services (public library), the university has placed some books and other reading materials. These collections are specific for OUT students. They are managed by Tanzania Library Services staff.
- iii. The University has established Information Units in all Regional Centres. Some reading materials and course manuals are placed there for the students. When students join the University for the first time, they are issued an information pack consisting of background information on the OUT. Regional Centres also conduct orientation programmes every year to equip students with basic information on how to study through distance learning.

(i) The status of the OUT Main Library

Observation of the library and an in-depth discussion with the librarian showed that while the university has just over 4,800 students, there are more than 25,000 volumes of printed materials, 15 current journal titles mainly obtained through exchange, 120 audio tapes, 30 video tapes and a range of course materials published by OUT itself.

The above figures can be compared with those of other distance learning institutions such as the University of South Africa (UNISA), which has a total of 117,046 students with 1.5 million volumes and 7,000 current periodical titles, as well as audio-visual resources available (http://www.unisa.ac.za). However, UNISA was established as a distance education institution way back in 1946. So, it has had a long history and has taken quite some time to develop such a huge collection, whereas OUT is only 8 years old.

The OUT library materials are catalogued and classified according to the Dewey Decimal Classification scheme. The library occupies the ground and middle floor of a two-story building. The problem with the OUT library, however, is that there are not enough materials to meet the needs of the academic staff and students based in Dar es Salaam. To solve this problem, many OUT students have registered with the University of Dar es Salaam library as external users. The OUT library also borrows books from the University of

Table 1. Students' response on availability of materials at TLS Information Units

Courses	Percentage in which the Units meet Information needs of students for each course			
	Dar es Salaam	Mwanza		
Bachelor of Law	1 – 10 %	0 %		
Bachelor of Education	31-40 %	1 – 10 %		
Bachelor of Arts	31 – 40 %	31 – 40 %		
Bachelor of Science	1 – 10 %	0 %		
Environmental Studies	21 – 30 %	1 – 10 %		
Diploma and Certificates	31 – 40 %	1 – 10 %		

Dar es Salaam library for its academic staff on using interlibrary loan.

The OUT library is facing an acute staffing shortage. Only two staff serve at the library. The strategy explained by the librarian involves the employment of part-time staff until the time when the University will be allowed by the government to employ new staff on a permanent basis. Employment in the government sector was frozen in Tanzania some years ago, requiring the institution to get special permission to hire. This situation has affected the performance of OUT library. The two staff members are too few to be able to handle all the tasks involved.

It was explained in the interview with the university management that financial constraint is the major reason that has made the library collection stagnate for all these years. The Open University of Tanzania is allocated with funds that are inadequate to support the growth and development of library services.

(ii) Regional Centres Information Units

The Open University of Tanzania introduced Regional Centres Information Units in 1995, only one year after it was launched. These are located in regional capitals to coordinate OUT activities in the regions. The Information Units are intended to provide information to all Open University students in the region. The scattered nature of the students however, seems to be a problem since some of them live in rural areas far away from the units which are urban-based.

Regional centres have residential tutors who assist students with guidance and counselling services. The centres also organise orientation programmes for students in the regions. They are

equipped with books and other reading materials. The materials are categorised as reference, general and fiction. All of them are catalogued according to the Dewey Decimal Classification scheme (DDC), just like those at the headquarters.

Findings from the study show that OUT collections at the Regional Information centres are not well developed. The number of reading materials is very low, ranging from 2,500 to 3,000 copies. Over half of the students interviewed (83 of 140, or 59.3%) felt that the Regional Information Centres are not relevant to their studies. Only a few books could be obtained to supplement their learning experience. The collections are not in a state to offer the information needed by an independent and isolated student who in many ways is away from his or her peers.

In addition to the small number of titles and copies, they are also not focused to the curriculum. Most of the books were acquired through donations. This is a common practice for many sub-Saharan African universities. As observed by Katundu (1998), 80% of the available collections in libraries and information technology services are obtained through aid, donations, gifts or grants from international organisations. The librarian does not have sufficient funds to assess the curriculum objectively and purchase books that directly reflect the curriculum. OUT is not exceptional, and therefore the relevancy of the materials can also be questioned.

OUT Information Units at the Tanzania Library Services

The Open University of Tanzania established information units at the Tanzania Library Services (TLS) in 1996. The concept of OUT information units at TLS branches is that OUT has selected some materials relevant to its curriculum. These have been place at TLS branches throughout the country. The materials are shelved separately and accessed by OUT students only.

In a percentage scale (0, 1–10; 11–20 etc.) provided in the questionnaire, students were asked to indicate the level of availability of reading materials in TLS information units to meet information needs of their courses. A summary of the responses is shown in Table 1.

Table 1 shows that the highest level that TLS Information Units could satisfy OUT students

was between 31–40%. This is only for a few courses as indicated on the table. Most of the courses were satisfied at the level between 1–10%. Only the Bachelor of Arts degree course had a response rate of 31–40% at both Dar es Salaam and Mwanza centres. In some cases the respondents could not find anything relevant to their courses. Judging from the response, it seems that the designated Information Units at the Tanzania Library Services cannot adequately meet the information needs of OUT students.

The Tanzania Library Services regional librarian in Mwanza seemed to have been tired of OUT students' information seeking and his failure to provide any assistance. He had these remarks:

... the collection is dormant. It does not meet and satisfy information needs required by OUT students in the light of the increasing number of students and the different courses offered."

The problem of insufficient and outdated reading materials placed at the Tanzania Library Services for OUT students was also pointed out by Mcharazo and Olden (2000, 206–7) when they investigated the learning resource requirements of students at the Open University of Tanzania.

Information support materials provided to newly enrolled students

When new students are enrolled with the Open University of Tanzania, they are provided with materials to support them with their immediate information needs for the courses and the distance learning mode. A checklist of materials provided is in Table 2.

Table 2 shows that most of students receive all the items that they are supposed to get after registration, with the exception of the students loan instructions, which only 52 percent indicated they received.

The orientation programme as a source of information to new students

Orientation sessions for the year 2001 were investigated in both regions. Variables investigated included instructional programmes to new students in the use of library resources and other information sources, guidance and counselling and issues on course administration.

Table 2. Materials provided to new students when they enrol with OUT.

Item	Number of	Percentage	
	Students who		
	received the		
	items		
Study Guide	133	95	
Prospectus	140	100	
Simple question papers	106	76	
Improving your performance	113	81	
booklet			
Students loan instructions	73	52	
Assignments	140	100	
2 First Tests	140	100	

N = 140

In Mwanza, the programme was conducted for one day only, 21 January 2001. A total of 97 students, 76 (78.4%) male and 21 (21.6 %) female, attended. These were mainly the first year students. There were also a few continuing students who probably hoped to achieve something out of the programme. The session was conducted by OUT academic staff from the Faculty of Education, assisted by the Acting Regional Coordinator.

During the sessions, papers containing messages from the OUT management were read. They stressed the roles and responsibilities of students and OUT in the learning process. This approach is similar to that of the University of Madras in India as cited by Keagan (1988). However, the University of Madras has an additional programme that focuses on the effective use of resources particularly those available via electronic media.

Questions based on individual programmes were mostly asked by continuing students and comprised about 75% of the time estimated. Most of them were not properly answered as they were specific and their tutors were not there. For example, questions asked by science and mathematics students concerning delay of their course materials from Nairobi and Abuja universities were not given satisfactory answers. The properly answered ones were those in the OUT representative's field, education. Students were neither given any orientation on the use of libraries nor given user education or skills in retrieving information from libraries and other information services.

Table 3. Institutions that serve OUT students with library services in Dar es Salaam and Mwanza Regions

Location	Name of the Library/	Number	Percentage	
	Institution	of OUT		
		students		
		who use		
		library		
		services		
Dar es	University of	44	48	
Salaam	Dar es Salaam			
Region	Library			
	British Council Library	22	24	
	National Correspondence	8	9	
	Institute			
	Institute of Finance	17	19	
	Management Library			
	Total students	91	100	
	(N = 91)			
Mwanza	High Court Library	13	27	
Region	Mwanza			
	Butimba Teachers' College	7	14	
	Library			
	Nyegezi Social Training	19	39	
	Institute Library			
	Bugando Medical Training	3	6	
	Centre Library			
	Libraries of Nearby	5	10	
	Secondary Schools			
	Book boxes at districts	2	4	
	Total students	49	100	
	(N = 49)			

In Dar es Salaam, there were 430 students across all faculties and years of study attending the 2001 orientation programme. The Director did not expect such a big number since only newly enrolled students were invited. The way the programme was conducted was more or less the same as that of Mwanza.

It was also revealed that the Open University does not incorporate in its courses the information retrieval skills and instructional programmes in the use of print and learning materials available in their local areas. A few reasons given by OUT management include lack of trained staff to work with distance students scattered all over the country and also lack of financial resources.

The manner in which the orientation programme was conducted shows that OUT has much to do to impart instructions on how to use library resources. Muphy (1992) observed that open universities tend to take distance students ability to use libraries and other information

services for granted. This assumption steps away from the fact that distance education students begin from an educationally disadvantaged environment as compared to full-time students. They also use different library systems to cater for their information needs. This would have been the basis for extensive training in information seeking and retrieval skills.

Other libraries and information services used by OUT students

As a response to the problem of access to information and other facilities not provided by the Open University, the staff and students have decided to make use of existing facilities in other institutions. A few of these include the University of Dar es Salaam library, the public libraries system, schools and colleges. Other institutions are used as study centres and provide laboratories for science practicals (Mmari 1998). The institutions students visit frequently for library services are shown in Table 3.

In some cases they go to these places simply to get an academically conducive environment to do their assignments. In Dar es Salaam, the common place is the University of Dar es Salaam Library. Here, Open University students currently pay Tanzanian Shillings 20,000.00 (about US\$ 20.00) and get permission to use the library for one academic year. However, this does not give them any borrowing privileges. Almost half (48%) of students residing in Dar es Salaam indicated that they use the University of Dar es Salaam library services. Other institutions commonly used are the British Council Library (24%), the Institute of Finance Management (19%) and the National Correspondence Institute (9%).

At Mwanza, the libraries mostly used include those of the Nyegezi Social Training Institute (39%), the High Court Library (27%) and the Butimba Teachers College (14%).

Information infrastructure and student dropouts

It was assumed that one of the possible causes of dropouts at OUT was the undeveloped information infrastructure. In this research, students who withdrew from their programmes were asked to mention reasons for withdrawing. The results are summarised in Table 4.

There were 36 students who withdrew from studies and happened to be interviewed. Table 4 shows that out of the 36 students interviewed, 33 (92%) indicated lack of sufficient information to support their studies as one of the reasons that led them to withdraw from their studies. They explained that apart from the course manuals, they could not get other reading materials to enable them to master the topics studied. They were even more frustrated when expected to submit their assignments, which they knew very well they had not done well because of lack of reading materials.

It was observed that the most affected ones are those from remote rural areas where there are no library services at all. Both males and females were equally affected by the problem of lack of information. Other reasons mentioned were financial constraints (82%); poor support from other people in the community (72%); failure to manage time (67%); lack of sufficient pre-requisite knowledge about the course (39)%; changing of ones interest (19%) and decreased motivation (11)%.

Administrative problems

Information is said to be appropriate only if it is relevant and reaches the user in time. There were some administrative problems mentioned by dropouts, including delays in sending learning materials in time and poor management of records. Two out of four rural dropouts mentioned these problems. For example, a first-year student registered for Bachelor of Arts in 1988 was dispatched the wrong learning materials. She had this to say:

Nobody took the same course within my reach. Having received a different learning package, I was totally discouraged. I wrote to the Regional Director with no reply. No one could help me and this lowered my morale and eroded my initial eagerness to learn.

This is among the administrative challenges facing OUT, that the records need to be properly kept. A system of effective and efficient communication between the learners and their tutors also needs to be established to avoid frustrations like the one above.

Table 4. OUT students reasons for withdrawal from their studies

Reason for withdrawal	Male	Female	Total	Percent-
				age
Lack of sufficient	16	17	33	92
information to support				
their studies				
Financial constraints	19	11	30	82
Poor support from	5	21	26	72
the community				
Failure to manage	21	3	24	67
their time				
Lack of pre-requisite	8	6	14	39
knowledge of the course				
Changing of ones interest	6	1	7	19
Decreased motivation	2	2	4	11
Other reasons	1	23	3	8

N = 36

Conclusion

The study found that the Open University of Tanzania has designed an excellent three-way system of information provision to distant learners: the Main library at the headquarters, OUT Information Units at the Tanzania Library Service branches and Information Units at Regional Centres. Had the system been stocked with adequate and up-to-date reading materials to support the curriculum, the university would have had no problems in information provision to its distance learners.

The overall picture that emerged from the study findings however, leads to the central argument that the information provision infrastructure to support independent learning at the university is still underdeveloped. There is a considerable cry of students for increased provision of information, which the University has so far not been able to satisfy.

The study found that the established library system of the Open University of Tanzania is not well stocked. The entire system cannot comfortably support distance learning students who live in non-learning environments with their own values and assumptions about learning. Library and information provision for students in the regions is not well developed to support the academic the programmes.

Lack of proper library and information services is mentioned as one of the reasons that has contributed to many students not being able to complete the courses registered for in time. Despite the efforts currently being undertaken, the Open University of Tanzania has not yet been able to put library and information services at the centre of the learning process. In light of this stance, OUT may in the long run, lose many students through dropout and withdrawal, especially those from the rural areas who have no other sources of information.

As a way of rectifying the situation, some OUT students have resorted to using library services and facilities of other institutions. These are mainly those who are urban based where such institutions and facilities exist. The rural based ones suffer double tragedy. OUT can not provide them with information services satisfactorily, and unlike in urban areas, there are no educational institutions established in rural areas to help them with their information needs.

Recommendations

Despite the problems revealed in the study, the open learning system in Tanzania continues to be a justifiable strategy of expanding university education in the country. Given this reality, the following recommendations are made with a view to improving the provision of information services specifically at the OUT and other open universities in the developing world. These are discussed here as possible solutions to the problem. They need to be considered more deeply if they are to be implemented.

The question we need to ask ourselves is: How much of the OUT annual budget is spent on the development of library and information services? Considering that library services is central for the development of academic programmes in any university, then there is need for OUT to reconsider its allocation to library services, and if possible, invest more on the services. Also, considering the dwindling budget that OUT is allocated from the central government, there is need to diversify sources of funding. Can donor agencies be approached and play a role here as it has been the case in many other universities in the developing countries?

The study has shown that the low graduation rate in the first four graduations of the year 2000 and 2001 can be attributed to, among other factors, lack of proper information services. Only

234 (31%) out of 763 of the first batch of students registered in 1994 managed to graduate. Poor information services was mentioned as the main reason for the low rate of completion. As such, OUT has to strive hard to put more resources into information.

It has been observed from the survey that rural based students are the most disadvantaged in getting information compared to the urban ones. Nevertheless, to help and provide them with information is difficult and in many cases not economically viable. For example, establishing information facilities where there are a few students on a particular course is not feasible. The reality is that such students will continue to rely on written course manuals. In view of this, can OUT put additional efforts on the quality and timely availability of course manuals? Can text-books that cover most topics be identified for each course and stocked at the headquarters or at regional centres for students to buy?

The distance education system is different from the conventional one that many students are used to. Students would therefore benefit more if they were given a thorough orientation on how the system works. Specifically, techniques in information seeking and the use of resources within their reach would benefit them. Areas like how to seek information linked to their courses, assignments and examinations need to be well taught during the orientation period.

The study revealed that OUT students benefited greatly from libraries and information services of other educational institutions. In utilising these services however, students faced some problems like entrance barriers, restricted number of borrowing materials and others. OUT could possibly revisit its arrangement with these institutions and have a clear formal policy so as to easy the process of using the facilities.

The final possible area that OUT can consider is that of information technology. Possible application of IT at OUT could be in areas such as:

- The use of CD-ROM databases e.g. ERIC for Education students as well as local databases such as Tanzania Law Reports on CD-ROM.
- Internet services for searching online information that is available through the World Wide Web.
- E-mail facility for easy communication between students and their tutors

- Electronic journals: For example, there is the African Journals Online (AJOL) service managed by the International Network for the Availability of Scientific Publications (INASP). OUT may consider joining the programme and giving User Names and Passwords to access a number of selected journals online. The need for having computers, information experts and institutional contribution to the programme will be apparent. Another similar programme is the Programme for Enhancement of Scientific Publications (PERI) which some African Universities including the University of Dar es Salaam have access to a range of journals electronically.
- Developing the OUT Web site for providing online information on course outlines, advertisements and dissemination of current information to students. Indira Gandhi National Open University (IGNOU) for example, has such a Web site for communication with students on various issues, including news, examination results, advertisements, study material dispatched and those received etc. Students only need to key in enrolment number to get access to the communication (http://www.ignou.edu).

The author is aware of the efforts that have been made to secure a few computers for OUT Main library. A well planned IT master plan that is integrated in the University Strategic plan could possibly be developed, that would include library information systems. Computers can be placed at OUT headquarters where tutors are stationed and also at the Main library. Others can be located at the Regional Centres and TLS branches where students can visit and search for

Editorial history: Paper received 18 February 2002; Final version received 27 June 2002; Accepted 1 July 2002. information and communicate with their tutors. To a great extent, this would contribute to solving the existing information and communication barrier that was revealed by the respondents in the study. To achieve this, financial and technological expertise is a requisite for such a development.

References

- Garland, M. 1993. "Penetrate the "I didn't have time:" rationale to elucidate higher order reasons for distance education withdrawal". Research in Distance Education 5(1 & 2).
- Katundu, D. 1988. The use and sustainability of Information technology (IT) in academic libraries in Tanzania. Ph.D. Thesis submitted at the University of Natal, Pietermaritzburg, South Africa.
- Keagan, D. 1988. *In over our heads*. London: Harvard University Press.
- Mcharazo, Alli and Anthony Olden. 2000. "Fulfilling the learning resource requirements of students at the Open University of Tanzania". *Journal of Librarianship and Information Science* 32(4): 204–14.
- Mmari, G. 1998. Putting knowledge to use: A case study of Open University of Tanzania. In: *Commonwealth of learning, Home page* 2. Available online. URL: http://www.col.org/gk97abst.htm [viewed July 20, 2002].
- Muphy, J. 1996. Distance education at the university. In: George, J., Nylehn, B. and Stokken, A.M. (eds.) Distance education in Norway and Scotland: experience and reflections. Edinburgh: John Donald.