Investigating the Information Needs of Sandwich and Part- Time Students of Two Public Universities in Ogun State, Nigeria

Abayomi Ebenezer Adesoye
Olabisi Onabanjo University Ago-Iwoye, adesoyeae@yahoo.com

Oyintola Isiaka Amusa
Tai Solarin University of Education

Investigating the Information Needs of Sandwich and Part-Time Students of Two Public Universities in Ogun State, Nigeria

Abayomi Ebenezer Adesoye
Multimedia Resource Librarian
University Library
Olabisi Onabanjo University
Ago-Iwoye, Nigeria

Oyintola Isiaka Amusa
Lecturer, Visiting lecturer
Department of Library and Information Science
Tai Solarin University of Education
Ijebu-Ode, Nigeria

Introduction

The advent of information age, the desire for higher education, and the proliferation of tertiary institutions have brought about the need for distance, part-time, and sandwich education opportunities. Virtually all the tertiary institutions in Nigeria, Colleges of Education, Polytechnics and Universities are providing distance or part-time education for the population of the country youth. Many of these youth are among the numerous higher education seekers that could not be admitted into full-time programme because of the paucity of space. Statistics have shown that one million Nigerian school leavers apply for university admission yearly, only twenty percent of this applicant are accommodated. Also, individuals who are constrained by jobs and family commitment are also taken care of by the programme.

Singh (1997, pp42-50) identified distance education as an educational approach which helps to bring education to the doorsteps of a large and varied clientele who cannot benefit from the conventional system of education. This suggests that distance education enlarges educational opportunities by capturing into its fold persons who could not access education due to certain constraints in their live settings and or in the conventional system of education. Also, Encarta (2007) defines the term distance education as, "formal instruction conducted at a distance by a teacher who plans, guides and evaluates the learning process."

Keegan (1997, pp 42-50) concludes that "the major goat of distance education is

to provide courses anytime, anywhere, and anywhere there are students or only one student". This approach to education can indeed serve the educational needs of individuals who are still out of the corridors of the conventional system of education for whatever reason. Arising from these definitions, Samalla (2008, Pp 269-278) observes that distance education, in its basic firm, is characterized by a teacher and learners whose contact with each other is enhanced and performed by a form of mediating technology. He further identifies three variables in a distance education transaction. These are:

- The teacher variable: as a planner, guide, and evaluator of the learning process;
- The learner variable: as a recipient of the planned and guided knowledge and;
- The communication variable:- as the channel or medium through items to be learnt are delivered to the learner, and feedback returned to teacher.

Shale and Gommes (1998, Pp 21-25) identify certain features of distance education which makes it suitable to the needs and interests of individuals who are not favoured by the conventional system of education. The features are absence of formal admission requirements; liberal policies with respect to time to complete courses; provision of continuous life-long learning opportunities through part-time study; continuous year round enrolment and self-pacing; and liberalisation or abolition of residency requirements.

As earlier stated in this introduction, institutions that provide distance and part-time teaming abound in Nigeria. There are however two national institution established to provide distance learning. These are National Open University of Nigeria (NOUN) for University education; and National Teacher Institute (NTI) for higher teacher education. Other tertiary institutions provide part-time and sandwich courses where students attended classes in evening, weekend and during long vacation. The two universities focused in the study fall into this latter category. The Universities are Olabisi Onabanjo University, Ago-Iwoye, and Tai Solarin University of Education. Both institutions are established and funded by the Ogun State government, Nigeria.

The two universities are striving to make earning of degree more feasible for several individuals in the state and outside it who have families and jobs. Also for several individuals who have desire to further their education to university level but who could not secure admission into conventional universities. These universities may have good intentions and policies on their part-time/distance programmes, their libraries have never at one time or the other conducted a survey of their students regarding their information needs, or finding out the adequacy of the available library services.

Furthermore, ACRL (2000) Guidelines for Distance learning library services strongly recommends that student be surveyed to determine library service needs and user satisfaction. Consequently, this study aims at surveying the part-time and sandwich students of the aforementioned universities. Besides this, it is more imperative that the libraries know their users and make efforts to serve them better, moreso with the influx of ICT that is rapidly changing the information management scene.

Other specific objectives of this study are:

- To identify the information needs of the students of the university;
- To identify the impediments to their information source utilization; and
- To find out the extent to which the students use electronic information sources.

Research Questions

Based on the above set-out objectives of this study, the following research questions shall be answered through the data gathered.

- What are the demographic variables of the respondents?
- What are the respondents' reasons for opting for part-time/sandwich courses?
- What are the library and information needs of the respondents?
- In what format do the respondents prefer their information sources?
- What are the library and information facilities available to the respondents?
- What are the impediments facing by the respondents in their use of library facilities of their respective universities?
- Are the respondents skillful in formation and ICT literacy?

Literature Review

Ault (2002, Pp.39-48), observes that at the advent of the new millennium and in the midst of the information age, distance education underwent rapid and widespread change. This is further enhanced by the faster and easily accessible information. Information is now easily accessible at fast speed, and that meant more people cold have the benefit of information and education.

Cooke (2004, Pp. 47-57) concludes that the provision of library services to non-regular and remote users can be so involved. Consequently, the library must understand distance and adult learners. He further advises that librarians must create policies and procedure specific to distance learning; they must coordinate programme correspondents such as document delivery and reference services; they need to market their services; they need to continually evaluate the best information resources; they must create and maintain websites, and they must collaborate with faculty, administrators and other librarians.

Distance education or part-time students as a group of information user, have their information needs and information seeking behaviours. Several studies have been conducted into these, Jaggen, Taliman and Waddell (1999, Pp. 131-175) observed that despite the wide variety of materials available to distance learning students, more students used only the instructor provided materials than any other source available. Another study by Stabch (1994, 48p), the researcher noted that while the public library was used most often by distance education students for books and journals, the students surveyed did use their home academic library as their primary source for article databases.

Shouse (1995, pp 355-362) identify convenience as the most important factor in distance students information source selection. She reported that higher overall usage of the public library distance learning students with convenience cited as the most important factor in information source selection.

In another survey of distance learning faculties and graduate students by Cassner and Adams (1998, Pp. 355-362), they found that the libraries of other institutions were used more frequently than the library at their respective institution as convenient to them. Closely related study conducted by the trio of Unwin, Stephens and Bolton. In the study, part-time students and faculty were found to use the public libraries more frequently than the library of their home institutions. Among the reasons provided for this are time, distance, convenience and lack of institutional collaboration.

Newton (2007, Pp. 140-464) examined the potential and actual roles that academic librarians play in supporting the development of information literate off-campus learners in Scotland and the United Kingdom. The study concludes that the most critical issue to be addressed is the integration of academic library professional within course teams. The librarians are willing to become involved in teaching and to take responsibility for the delivery of information literacy courses for off-campus learners, but in order to do so effectively they must operate and

interact with students within the same learning space as the academic staff.

On the African scene, Kavulya (2004) looked into the challenges of providing library services for distance education students. Three Universities in Kenya were selected for the study. He commended the efforts of the universities in making provision for distance education learners and advocated collaboration between information personnel and those who design and implement distance education programmes. He however emphasized that, "distance education students needed adequate library services if they were to gain quality education."

Mabawonku (2004, Pp. 151-166) conducted a survey of library use in distance learning in three Nigerian Universities. The study concluded that the universities studied did not adequately provide for the library needs of the students. Also in Nigeria, Aramide and Ayankola (2008 Pp. 1) conducted a study into ICT application and utilization for distance and open learning. The study identified ICT facilities available for distance learning at the National Open University of Nigeria, the use they are put into and factors that hinder effective use of ICT in the university. The study in conclusion recommended provision of adequate ICT infrastructure and training and re-training of the course facilitators in the university.

Furthermore, Boadi and Letsolo (2004, Pp. 189-199) investigated the information needs and seeking behaviour of distance learners at the Institute of Extra-Mural studies in Lesotho. They reported that the students' sources of information were colleagues, personal collection and family members. They use the on-campus library resources less because access to them is not easy.

Lastly, on the African scene, Oladokun and Ama (2009, Pp. 43-50) looked into the library and information needs and barriers to the use of information sources by continuing education students at the University of Botswana". Their study aimed at the identifying the library and information needs of the part-time evening students; identifying establishing the computing and information skills by the part-time evening students. The study found out that major areas of information needs of the respondents are related to course of study; job opportunities; career development and further education. The study also found out that the university library does not adequately cater for the library and information needs of the students. The study however recommends that the University of Botswana library should ask for space in the local public libraries, and school libraries to keep some materials for the distance learning students use.

Distance Learning And Information Technology

Information Technology (IT) plays crucial roles in providing library and information service to part-time/distance learning students. Gopakumar and Baradol (2009, P. 61) submitted that:

The web opens new windows of opportunity to provide information support to distance learners. Electronic documents can be made available anywhere and anytime those two computers can connect. What makes this possible is the ubiquitous World Wide Web. With the technology of the Web, library documents can be viewed and printed by any person who has a web connected computer, whether that person fives nearby or in another distant location.

Furthermore, e-mail makes it easy to contact anybody at anytime in the world in few seconds.

In an earlier study conducted by Neimi, Ehrard, and Neeley (1998, p. 20), they concluded that:

> What distance learners expect of libraries is the ability to search periodical indexes, abstract, CD-ROMs and bibliographic services such as ERIC; do electronic book check out and renewal over the telephone (toll free); deliver photocopies, the results of literature

searches; internally track and deliver all inter library loan services; and establish an electronic feedback system.

Some library and information services that can be offered to the part-time distance learners, as identified by Gopakumar and Baradol (2009, 6p) are:

- Library websites as a service point
- Online Public Access Catalogue (OPAC)
- Document Delivery through Regional Study Centre
- Electronic Reference
- Access to E-journals
- E-Reserve
- Information Literacy
- Online Reference Sources

Empirical Studies on IT and distance learning have revealed that distance students were following the same trends that had been ob served in the traditional population. These are changes in part-time students usage pattern which now favour the use of electronic resources, the Internet in particular (Thompson, 2007, P. 7) Kelley and Off (2004, Pp. 175 - 191), also noted that, "the technologies may change but, at the same time, students overwhelmingly prefer to have instruction delivered in a format tat is accessible off-campus and offers them flexibility in when they receive instruction."

Also, Mclean and Dew (2004, 265-Pp. 303) found out that electronic resources were favoured over instruction. Their reasons for this may not be unconnected with the advantages of e-resources postulated by Lee (2002). The advantages are:

- Speed of access to latest information
- Ability to incorporate multimedia elements
- Quick searching
- Linking from and to other (hypetext capability)
- Security (no fear of loss)
- Multi-user capability
- Downloading and printing the article is very easy

Liu and Yang (2004, 24 -35) conducted a survey of graduate students in distance learning regarding their use of information resources. The study specifically focuses on the factors that lead to information resource selection. The study found out that the respondents overwhelmingly used the internet as their primary source for information and cited speed as their number one concern in selecting a primary information source.

Methodology

This study employs survey method to investigate the information needs of sandwich and part-time students of Olabisi Onabanjo University (OOU) and Tai Solarin University of Education (TASUED). The two universities are owned by the Ogun State Government, Nigeria. They are located at about 30km away from each other. OOU is a conventional university offering courses in Arts, Education, Science, Social Sciences, Engineering and Technology, Agricultural Sciences, Law and Medicine. TASUED on the other hand is a specialized university of Education. It offers Arts, Sciences, Social Sciences, Technology, Agriculture, and vocational education.

By 2008/2009 academic session, the total population of the category of students in focus (part-time/sandwich in OOU is 9,617 (estimate); and 7,300 in TASUED, totaling 16,917 students. Proportional sampling method was used to select 30% of the student in each of the universities. As such, 5, 675 students, (OOU 2885, and TASUED 2,690) were selected as population sample.

Questionnaire is the main instrument used to gather data from the population sample. 5,190 copies of the questionnaire was produced and randomly administered on the respondents in the universities. The exercise lasted 20 working days. Descriptive statistics were used to analyze the data collected through the questionnaire. The rate of response to the questionnaire was encouraging; 5,117 copies of the questionnaire were duly completed and returned. This figure represents 98.5% of the total copies administered. Breakdown of this figure shows that 2,796 (55%), and 2,321 (45%) responses were received from the respective universities.

Data Analysis And Discussion

Analysis of demographic data of the respondents revealed that 2,695 respondents (53%) are male, and 2,422 respondents (47%) are female. Their age distribution range from 20 - 59 years. Specifically, majority of them 2,073 respondents (41%) are between 25 - 39 years; 1,700 respondents (33%) fall within 20-24 years age group; 1,026 respondents (20%) are between 40-44 years; and the remaining 318 respondents (06%) are over 44 years. These findings indicate that sandwich/part-time courses are being undertaken by both male and female students, majority of whom are matured candidates between age 25-49. However the programme also attracts younger candidates. (See Tables I & 2).

The respondents mode of study are mainly sandwich (during vacation) and weekend programmes. Sandwich candidates are majorly primary and secondary school teachers who prefer to use their holidays for further studies. Weekend programme candidates are workers, and those respondents who fall between age 20-24 years. This tatter group chose weekend programme due to one reason or the other. Also, the respondents level of studies ranges from 100 level to 600 level. Part-time/sandwich candidates spend a year more than their counterparts on full-time programme. That is, a 4-year programme at full-time level will take 5 years for part-time programme. From the data gathered, majority of the respondents (1,330) representing 26% are in 400 level; (17%) are in 500 level. Other respondents are in 100 levels, 200 level and 600 level respectively.

Furthermore, their course of studies cut across disciplines in the Arts, Agriculture, Education, Science, Social Science, and Technical education. Engineering and Technology, Law, Medical Sciences, and Pharmaceutical Sciences are left out. These courses are not available on part-time basis in the universities. See table 5 for the distribution of the respondents by disciplines. Their reasons for opting to purse their choice course on part-time/sandwich basis due to:

- Job demand/constraints (3,127 respondents, 61%)
- Inability to secure full-time studies (1036 respondents, 2050
- Marriage demand/constraints (845 respondents, 17%)
- Flexibility of part-time/sandwich programmes (109 respondents, 2%)

Attempt was made in this study to find out the information sources known to the respondents. Analysis of their responses reveal multiple responses. The respondents ticked more than one options. However, their responses also reveal that they are quite conversant with library resources. (See table 7). Their information format preference show that they prefer information sources in both print and electronic formats. 2,096 respondents (41%) attested to this. 2,041 respondents (40%) prefer printed resources only, and 980 respondents craved for electronic/audio-visual resources only. (See table 8).

The information needs of the respondents are diverse, it varies from information on their course of study, and career development, to information on current affairs and politics. (See table 9). However, the respondents view on the extent to which their university libraries provide for their information needs reveal a necessitous state. Majority of the respondents (3006,59%) considered the services of the Libraries as

fair; 1,512 respondents (29%) consider them poor, while only 599 respondents (12%) thought hey are good. (See table 10). From the researcher's views and judgement, library services for the sandwich/part-time students of the institution is less adequate, and their services below expectations. The situation in OOU is a bit better than that of TASUED. OOU has two scantly stocked libraries to provide for her part-time/sandwich students at two study centres (Ijebu-Ode, and Ijebu4gbo) TASUED has none for them, but the institution expect the students to visit its main campus library for ther information needs. Also, while OOU has other six libraries that the students can use, TAUSED has only one, its main library.

There are other impediments to the respondents meeting their information needs, and to the utilization of library and information resources. These impediments in order of priority, among others are:

- Inadequate library facilities (1377 respondents, 27%)
- Lack of time due to the intensive nature of the programme (1099 respondents, 21%),
- Paucity of desired resources (1054 respondents, 20%) and;
- Reliance on study packs/materials. (See table 11)

The study in conclusion sought to know the ICT skills and information searching abilities of the respondents. Majority of the respondents rated themselves fair on the issues; 2096 respondents (41%) rated themselves fair. 2041 respondents (40%) considered themselves poor, and only 980 respondents thought they are good. (See table 12).

Conclusion and Recommendations

Reference to the analyses of data used for this study, it can be concluded that sandwich/part-time students cut across both sexes, they are of 20-59 years age range, and they have reasons for undertaking part-time/sandwich academic programme. Among these reasons are job demand/constraints, and flexibility of the programme. Part-time/sandwich students' course of studies cut across Arts, Social Sciences, Sciences, and Applied Sciences; and their information needs relate majorly to their respective disciplines, and other socio-political issues.

Furthermore, they are quite aware of library and its resources, as such, they make use of their institutional libraries to meet their information needs. However, the libraries and their services, in their judgement, fall short of their expectations; 59% of the respondents attested to this. Other impediments to the respondents information needs, among others are inadequate library facilities, and reliance on study packs provided by the institutions. Absence of commanding ICT and information searching skills among the students also account for their problem in accessing information. This has resulted into their inability to use electronic resources available through the Internet, and to search their libraries for information sources.

Arising from these conclusions, the following recommendations can be offered:

The University should recognize the rights of the students to access right information in the desirable formats. As such, the universities should make library services available to the students in their various study centres. Also the universities can enter into some arrangements with public and secondary school library within their domain for space to stock tertiary texts for the benefits of part-time/sandwich students.

The students ICT and library use skills can be enhanced through provision of adequate practical training. The training will make them information literate, and inculcate the habits of effective use of library resources.

Acquisitions of or subscription to electronic resources and provision of training to

students on how to use them can be adopted by the universities. Electronic resources due to their peculiar advantage over print resources, will go a long way in providing for the information needs of the students. Also problem of paucity of desired information sources will be drastically taken care of. The students, with the appropriate access code can make use of the e resources in their respective homes, offices etc.

In order to encourage library use and exposure of sandwich/part-time students to varieties of information, the study packs provided by the school should be reviewed. The packs should contain bibliographies of relevant sources, assignment that can make the students visit libraries, and the packs should not answer review questions.

Provision of bookshop services at reduced prices. The universities can consider these for their study centres. Availability of textbooks, and the information sources to the students will to some extent assist in meeting their information needs. This will at the same time generate some income for the universities.

Tables

Table 1: Sex of the Respondents

Sex	Frequency	% Frequency
Male	2,695	53
Female	2,422	47
Total	5,117	100

Table 2: Age Distribution of the Respondents

Age Group	Frequency	% Frequency
20 - 24	1,700	33
25 - 39	2,073	41
40 – 44	1,026	20
45 – 59	318	06
Total	5,117	100

Table 3: Respondents Mode of Studies

Mode	Frequency	% Frequency
Vacations (Sandwich	1,770	25
Weekends (part-time)	3,347	65

Evening (part-time)	-	-
Total	5,117	100

Table 4: Respondents Level of Studies

Level	Frequency	% Frequency
100	730	14
200	821	16
300	1.052	21
400	1.330	26
500	853	17
600	331	06
Total	5,117	100

Table 5: Distribution of Respondents by Disciplines

Discipline	Frequency	% Frequency
Arts	509	10
Education/Applied Educator	728	14
Engineering & Technology	-	-
Agricultural Sciences	318	08
Law	-	-
Medical Sciences	-	-
Sciences	672	13
Social Sciences	1,057	21
Management Sciences	1,398	27
Vocational and Technical Education	372	07
Total	5,117	100

Table 6: Respondents Reason for Opting for Part-Time/Sandwich Programme

Reason	Frequency	% Frequency
Marriage Demands/Constraints	845	17
Job Demands/Constraints	3,127	61
Inability to secure full-time studies	1,036	20
Flexibility of part-time/sandwich programmes	109	02
Desire for Higher Education	-	-
Total	5,117	100

Table 7: Library and Information Resources Known to the Respondents

Resources	Frequency	% Frequency
Reference Sources	5,117	100
Textbooks/Monographs	5,117	100
Serials publications	5,117	100
Audio-Visual resources	589	12
Electronic resources	2,312	45
The Internet facilities	5,117	100
Reprographic facilities	5,117	100

Table 8: Respondents Information Sources Format Preference

Format	Frequency	% Frequency
Printed resources only	2,041	40
Electronic/A.V resources only	980	19
Both printed/electronic/AV Resources	2,096	41
Flexibility of part-time/sandwich programmes	109	02
Total	5,117	100

Table 9: Information Needs of the Respondents

Information Needs	Frequency	% Frequency
Information on their course of studies	5,117	100
Information on health, politics, economy, trade and commerce	4,951	95
Information on career development and job opportunities	5,117	100
Information on academic development and scholarship	3,692	72
Information on self development and problem solving	3,886	76
Information relating to professions and professional activities	4,712	92
Information on current and issues	3,009	59
Total	5,117	100

Table 11: impediments to Utilization of Library Resources and Facilities

Impediments	Frequency	% Frequency
Inadequate library facilities	1,377	27
Paucity of desired resources	1,054	20
Lack of time due to the intensive nature of the programmes	1,099	21
Inadequate library use skill	344	07
Absence of electronic resources in the libraries collection	589	13
Heavy reliance on lecture/study packs provided by the universities	654	13
Total	5,117	100

Table 12: Information Searching and ICT Skills Possession by the Respondents

Skill	Frequency	% Frequency
Excellent	-	-
Good	980	19
Fair	2,096	41

Poor	2,041	40
Desire for Higher Education	-	-
Total	5,117	100

*Sources of all the data in the above tables are through the survey conducted for this study in the year 2009 December.

References

ACRL Standard and Guidelines. 2000: Guidelines for Distance Learning Library Services. *C & RL News 61*(11): 1023-1029.

Aramide, K. A. and I. A. Ayanlola 2008: ICT application and utilization for distance and open learning education at the National Open University of Nigeria (NOUN). NIGERIAN School Library Journal.

Ault. M. 2002: Thinking outside the library: how to develop, implement and promote library services for distance learners. *Journal of Library Administration 37* (1/2): 39-48.

Barron, B. B. 2002: Distant and distributed learners are two sides of the same coin. *Computers in Libraries 22*:26.

Boadi, B. V. and P. Letsolo 2004: Information needs and information seeking behaviour of distance learners at the institute of extra-moral studies in Lesotho. *Information Development 20*(3): 189-199.

Cassner, M. and K. Adams 1998: Instructional support to a rural graduate population: an assessment of library services. In *Fifth off-campus library services conference proceedings*, ed C. J. Jacob, 455-462. Mount Pleasant, Ml: Central Michigan University.

Cooke, N. A. 2004: The role of librarians in web-based distance education: an account and an analysis of the impact of web technology on distance learning — what remains unchanged, what is changing. *Journal of Library and Information Services in Distance Learning 1* (4): 47-57.

Gopakumar, V. and A. Baradol 2009: Assuring quality in distance education for library and information science. The role of the Library. *Library Philosophy and Practice*. Available: http://unllib.unl.edu/LPP/gopakumar-baradol.htm

Jaggen, K. E., E. M. Tallrnan, and W. B. Wadeell 1994: Library services to off-campus sites: An assessment survey. In *Seventh off-campus library services conference proceedings*, ed. C. J. Jacob, 131-135. Mount pleasant, Ml Central Michigan University.

Kelley, K. B. and 0. J. Orr 2004: Trends in Distant Student use of Electronic Resources: A Survey. *College and Research Libraries 64*(3): 176-191.

Lees, S. D. 2002: *Building an electronic resource collection: A practical grade*. London: Library Association.

Liu, Z and Z. V. Yang 2004. Factors influencing distance — education graduate students' use of information resources: A user study. *The Journal of Academic Librarianship, 30*(1): 24-35.

Mabawonku, I. 2004. Library use in distance learning: a survey of undergraduates in three Nigerian Universities. *African Journal of Library, Archives and Information Science, 14*(1); 151-166.

Mclean, E. and S. H. Dew 2004. Assessing the Library needs and preferences of off-campus students: Surveying distance education students from the Midwest to the West Indies. *Journal of Library Administration 41*(1/2): 265-302.

Neimi, J. A., B. J. Ehrard, and L. Neeley 1998: Off-campus library support for distance adult learners. *Library Trends, 47* (1) 147.

Newton, Robert. 2007: Developing information (iterate off-campus learners: pedagogical issues and current practice. *Libri 57* (3): 140-164.

Oladokun, O. S. and L. O. Aina 2009: Library and information needs and barriers to the use of information sources by continuing education students at the University of Botswana. Information Development, 25 (4). Available at http:///dv sagepub.com/cgi/contentlabstractl25/1/43.

Samaila, J. 2008: Strengthening the capacity of distance education in the training of teachers to achieve the millennium development goal on education in Nigeria. *International Journal of Research in Education, 5* (1 & 2): 269-278.

Shale, D. and J. Gomes 1998: Performance indicators and University Distance Education Providers. *Journal of Distance Education, 8*(4): 12-25.

Shouse, D. L. 1995: Library needs of rural distance education students. In *Seventh off-campus library services conference proceedings*, ed. C. J. Jacob, 355 — 382. Mount pleasant, Ml: Central Michigan University.

Singh, B. 1997: The practice and management of distance education. *Journal of Distance Education, 8*(4): 42-54.

Stasch, M. 1994: *A survey of information sources used by students involved in distance education*. MLS. Thesis. USA: San Jose State University, 48.

Thompson, A. J. 2007: *Information seeking behaviour of distance education students*. MLIS thesis. North Carolina: University of Nuth Carolina at Chapel Hill, 48p.

Unwin, L. K. Stephens, and N. Bolton 1998: *The role of the library in distance learning. A study of postgraduate students, course-providers and librarians in the UK*. London: Bowker Saur.