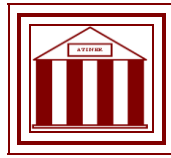


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**The Information Practices of Users of Veterinary
Library of Algiers: What Reflection for the
Establishment of a Digital Library?**

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This paper should be cited as follows:

Bernaoui, R. and Hassoun, M. (2016). "The Information Practices of Users of Veterinary Library of Algiers: What Reflection for the Establishment of a Digital Library?", Athens: ATINER'S Conference Paper Series, No: lib2015-1803.

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www.atiner.gr
URL Conference Papers Series: www.atiner.gr/papers.htm
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ISSN: 2241-2891
25/01/2016

The Information Practices of Users of Veterinary Library of Algiers: What Reflection for the Establishment of a Digital Library?

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Abstract

Algeria scientific literature in medicine veterinary tries to require a better organization and the best appreciation of scientific production. This leads to consider the establishment of a digital library which aims to reflect the combination of traditional services and new digital services provided by the technologies of communication and information.

Before the library of the Higher National Veterinary School of Algiers (ENSV) followed no librarianship standard. It is thanks to a policy of restructuring that we managed in order to introduce the documentary tools for intellectual processing of documents and computerization. To realize this project, a methodological approach was followed, by respecting the universal standards of document processing.

The computerization project conducted the different modules (acquisition, loan management, inventory, online catalog, information retrieval ...) with developing a specification.

This computerization of the library was a starting point to think about the establishment of the digital library. The needs analysis of users in order to establish a digital library of the Higher National Veterinary School of Algiers revealed users' expectations for a better visibility of the acquired holdings and a better using of scientific heritage.

Keywords: University library, Digital library, Veterinary library, Information Practices, Algeria.

Introduction

In the digital era, our society favors the screen. It has even become a sort of obligation to promote the new technologies rather than books and paper, also in education and scientific research. Nowadays, most libraries move from the computerized management of documents to the digitization of content.

The field of digital libraries (DLs) coalesced in 1994: the first digital library conferences were held that year, awareness of the World Wide Web was accelerating, and the National Science Foundation awarded \$24 Million (U.S.) for the Digital Library Initiative (DLI) (Xiaomin and Bollen, 2005). Indeed, it is in the 1990s that the digital libraries started with creating websites.

Notwithstanding intense research activity in the digital library field during the second half of the 1990s, comprehensive software systems for creating digital libraries are not widely available. In fact, the usual solution when creating a digital library is also the most obvious just put it on the Web. But consider how much effort is involved in constructing a Web site for a digital library (Witten and McNab, 2000).

A paradigm change is required, and that revolves around a transition from analogue space to digital space. (Papy, 2005) announces it, revealing that this transaction «...*is a real cultural revolution by transforming the nature of the treated object.* » Thus, in the digital era, libraries must reorient their missions facing an immaterial documentary process. We can say that a digital library is now defined as an organized collection of electronic documents in open access. It is associated with an interface for research and consultation documents online.

Kenton O'Hara, Fiona Smith, William Newman and Abigail Sellen discussed this theme in their paper that title is « Student Readers' Use of Library Documents: Implications for Library Technologies ». They reported that there are many studies about this subject, nothing that « *the need to understand the requirements and work practices of library users is one that is very much recognised in the literature. Indeed there are many examples of user-centred approaches to the design of technology for the "digital library" [e.g. Fox et al., 1993; Kiestra et al., 1994; Smithson, 1994; Wood ET AL., 1996]. However, much of this end-user research generally has a very narrow focus [e.g. C. Barry, 1996]. With the odd exception [e.g. C. Marshall, 1997], user-centred approaches have concentrated primarily on how users search for and retrieve information. As such, much of the design effort in the field has been aimed at providing support for these activities* » (O'Hara and Smith, 1998).

The term of digital library is used to denote a library where all or some of the documentation is available in digital and also, the services are made available electronically by Internet. In Africa, libraries are late because of the digital divide.

In 2004 INASP commissioned a survey of the current status of digital libraries in sub-Saharan Anglophone Africa, so as to draw conclusions on where future developments and investments might be made, and what can be

learnt from the implementation of digital libraries within the continent (Rosenberg, 2005).

Our study concerns a country in North Africa. In this context, Algerian scientific documentation of veterinary regarding in this subject requires a better organization and a good valorization of scientific production. This leads to consider the establishment of a digital library which purpose could be the reflection of the combination of traditional services offered by professionals and the new digital services provided by technologies of communication and information. We have as an example, the free and open access on the Internet, the possibility of a research, an online consultation and finally, the application of selective dissemination of information, depending on the interest profile.

It is important to remember that Algeria lags far behind the failure of plant and animal production, which has grown from a dependence on imports of various food products (milk powder, meat, cereals ...). The government realized that the solution of long term is the scientific research. It can improve our potential. However, the availability of scientific information is almost essential to achieve the objectives. Therefore, we believe that the role of the future digital library veterinarian will perform in the collection, selection, monitoring of research, conservation and offering new digital services and products.

To achieve these aims, the direction of the library from the Higher National School of Veterinary (ENSV) of Algiers intends to be part of this approach of valorization and of visibility of its library resources and scientific production from its physical space. In order to realize this project, we realize a study on the analysis of the needs of users of the ENSV in 2013. A methodological approach was carried out through quantitative and qualitative investigation, in terms of offers of digital resources online. This study allowed us to understand the practices and expectations of library users.

Therefore, before we engage in the study of the needs for the establishment of the veterinary digital library, we take an overview of ENSV and its documentary service. This school trains veterinary doctors after a course of five years. It delivers also Post-Graduate education (magister and doctorate), Specialized Post-Graduation (PGS) and attractive continuing education for veterinary professionals.

In the past, the library of ENSV didn't follow the universal standards of librarianship. It is thanks to a policy of restructuring that we succeeded to introduce the documentary tools for intellectual processing of documents and also, the project of computerization of the holdings of the library. For the realization of automation appearance, a methodological approach was followed, while respecting the universal standards of physical and mental processing of documents. It is therefore in 2005, we carried out the computerization project of the various modules (acquisition, loan management, inventory, online catalog, documentary research...), while developing a specification.

Actually the direction of documentation of the National Veterinary School (ENSV) is a specialized university library that holds veterinary medicine

collections. It is spread over two main areas: clinical and preclinical with a documentary collection of 22,000 volumes. It is enriched with all types of documents (books, theses, reports, periodicals, CDs, DVDs ...) for more than 1,400 students enrolled.

Methodology

The organization of the survey included two main phases. An exploratory phase (which consisted in realizing a preliminary) was to conduct a preliminary survey, followed by exploratory and additional interviews and another phase that has been devoted to the questionnaire survey.

The preliminary survey allows us to test our questionnaire on a sample of 41 respondents to determine the degree of clarity of the questions to respondents. Before administering the final questionnaire, we decided to conduct an interview no-directive¹. This technical helped us to understand our field of study. The interview was limited to 10 agents (5 teachers and 5 students) by face-to-face.

On a total population of more than 1,400 agents, we distributed a total of 250 questionnaires. The collection lasted 3 months (May, June, and September 2013). We had 195 returns, or a rate of 77.60% of answers selected.

By this study, we present just partial results of a survey that was conducted to users of higher national veterinary school of Algiers (students, teachers, teacher-researchers) (Bernaoui and Guermour, 2013).

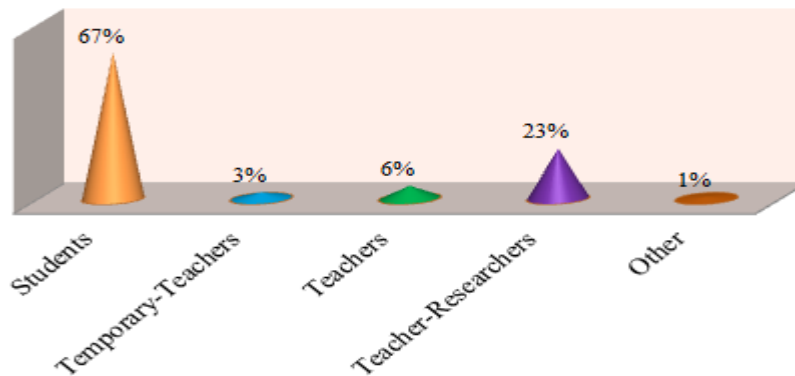
Results and Discussion

Distribution of Users by Veterinary Degree

The population distribution by level of study is useful, because it will tell us about the grade of the users. Indeed, the classification of users by degree reveals that the majority (67%) of the respondent scientific population regarding the student class.

This is followed by an important rate of 23%, representing the class of "teacher-researchers" and who are interested in scientific research. This inclines us to think that researchers are already introduced into research projects "institutional" and those who have a magister are engaged in "personal" projects, such as the doctoral thesis. By cons, a low rate concerns teachers and temporary teachers with a respective 6% and 3% (Figure 1).

¹ Interview no directive (or free interview) called "interview centered on the person," according to the American psychologist Carl Rogers. The prupose of this interview is to create a comprehensive and dynamic situation. The role of the investigator is to just possibly refocus the discussion on the subject of the investigation.

Figure 1. *Users by University Degree*

Information Practices of Users of Veterinary Library of Algiers

In facilitating the sharing of knowledge, the library of Higher National School of Veterinary becomes an essential tool for the development of information and documentation practices for this scientific community.

Types of Document Used in Digital Library

User expectations in terms of the type of documents that they hope to find, through the future digital library of veterinary provide guidance on sources of information to be considered for this project. They express a clear preference for theses with 23%. So, in this way, we see their strong interest in the local scientific production of their school.

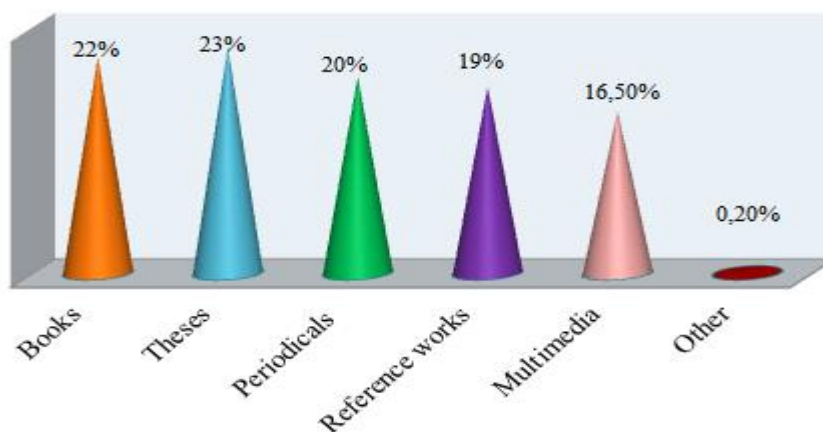
The books come in second place with 22%. They are followed by periodicals and reference works (dictionaries and encyclopedias,) with a rate that varies between 19% and 20%. Both this types of media contain "certified knowledge" and transmit scientific information not only current but also of precision and synthesis. For the multimedia documents represent 16.5% of users of veterinary wishes (Figure 2).

We see through the results of the survey that respondents are interested in all types of documents downloaded by the future digital library.

In this context, we have a study of « Networked Digital Library of Theses and Dissertations » (Suleman and Atkins, 2001) that explains the role of uploading documents to the benefit of the university community. This federation has multiple objectives, including :

- to improve graduate education by allowing students to produce electronic documents, use digital libraries, and understand issues in publishing;
- to increase the availability of student research for scholars and to preserve it electronically;
- to empower students to convey a richer message through the use of multimedia and hypermedia technologies.

Figure 2. *Types of Documents Used*



We find that the interests of users for all types of documents is part of a first documentary of university. Supporting this, a researcher in her IGB report (General Inspectorate of libraries) discusses «the digital evaluation in French libraries» it revealed that the library often plays the dual role of "creator" and of "diffuser" of electronic resources. It is therefore appropriate to assess the institutions as producers and not only as a resource broadcasters (Jouguelet, 2009).

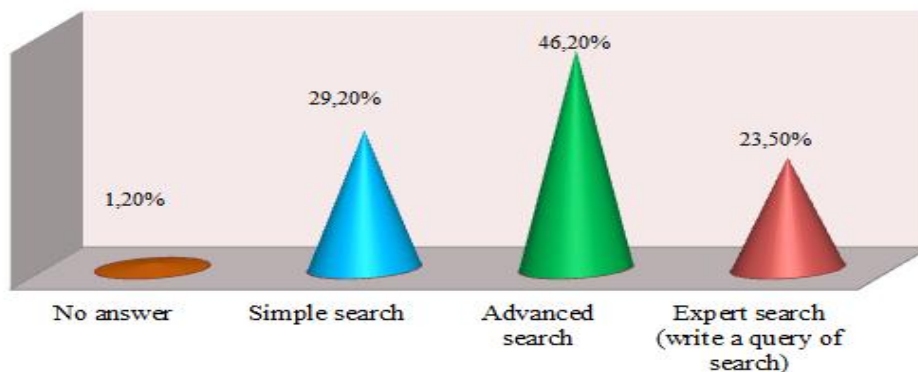
Documentary Practices Veterinary Users

The analysis of our survey data shows that modes of access to documentary research shows that 46% hope to make their request through the advanced search (combination of search criteria by using the Boolean equations: and, or, not).

Moreover, almost a third of the surveyed population prefers the simple research, since this procedure is more fundamental and practical in terms of use of keywords.

In terms of expert research, by reproducing a query on the desired subject, the percentage rate users interested in this application represents 23.5% (Figure 3). This leads us to suggest that this mode of research is more related to experts in information science.

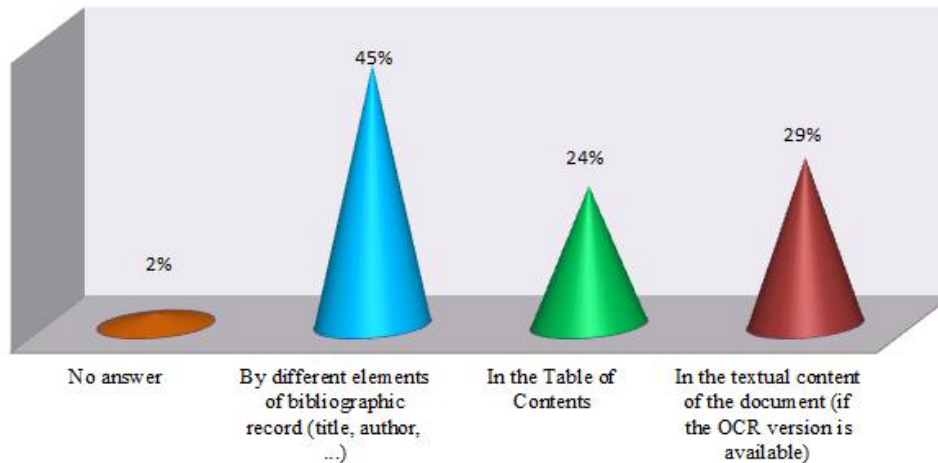
Figure 3. *Research Methods*



As for the research areas that veterinarians are hoping to manipulate for their documentary research revolve around a majority of 45% who are interested in the use of several elements of the bibliographic record (title, author,) in order to expand opportunities to reach to relevant information.

Finally, about the research in the textual content of the document, we have 29% of users who wish to have the primary document in full text on their computer of work. By cons, we note only 24% who hope to have an overview on the content, while conducting a search in the area of the tables of contents (Figure 4).

Figure 4. Areas Research



Procedure of Use of Document

In view of the results of this survey, we note that the best way for veterinarians to use the documents, through the future digital library of their institution is based primarily on downloading and recording all types of documents with 44 % of wishes (Figure 5). In this way, they could keep them and consult them timely.

While, we have nearly 28% of respondents who hope to have the possibility to print directly the downloaded document. This argued that the paper can never be definitively replaced by digital. These readers still prefer to touch the documents and take notes on.

Moreover, we have a number of percentage that almost have the same rate who hope to consult carefully and fully online documents with 15% and for those who want to view documents quickly and partially online with 13%.

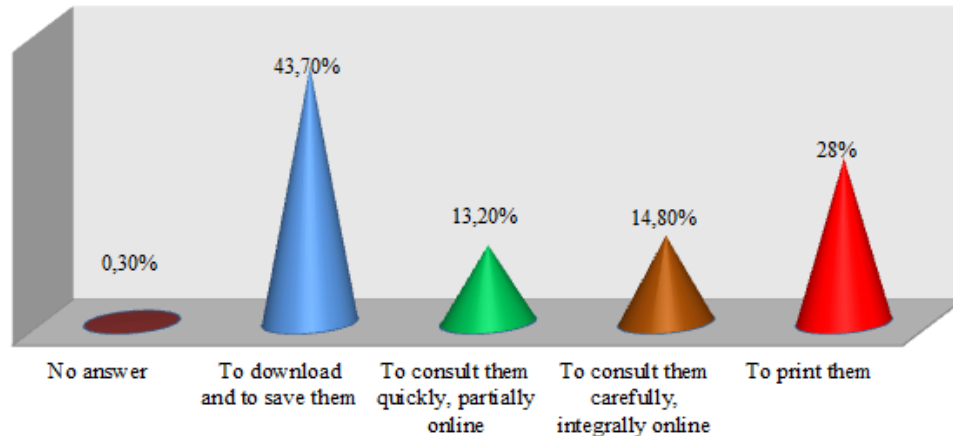
These results lead us to believe that this may probably vary according to time and equipment to be distributed to them.

These results lead us to believe that users have trust to find easily the information and come back at the right time, through the new National Portal of Documentation Online (SNDL)². It is important to note that currently the

² The SNDL is available online through the network ARN (Algerian Research Network) hosted and managed by CERIST. It makes available to the scientific community (researchers, lecturers, PhD), an updated scientific information in the form of digital documentation.

Algerian scientific community benefits from digital sources that are found across all academic institutions. The SNDL includes different processes: a national and international scientific production, a collaborative platform and management and knowledge sharing tool. The creation of this consortium has been acquiring electronic resources bouquets ensuring open access to international databases.

Figure 5. *Use of Documents*



Results of Documentary Search

Under this application, we ask the question about the actual use of the registered documents. Are users really read literature that saved it? In a study on «Research of Tomorrow: doctorants britanniques, numériques et bibliothèques» directed by (Touitou, 2012) to understand the uses and expectations of doctoral students, the author notes that *«these students download a large number of documents more than they actually read. The management of these files on their computers and their citation are a recurring problem»*.

Regarding our study, we note that the users of the veterinary school of Algiers have a real need to follow training on documentary research and applications of Web 2.0 are already programmed in their university studies of graduation and of post-graduation.

The study on the analysis of the needs of users of the library of ENSV of Algiers shows a high rate of users who are interested in saving the results of their research. The aim is to use them to other topics that will be discussed later. This justifies that the majority (42%) is characterized by a desire to conserve their results of documentary search in a personal space.

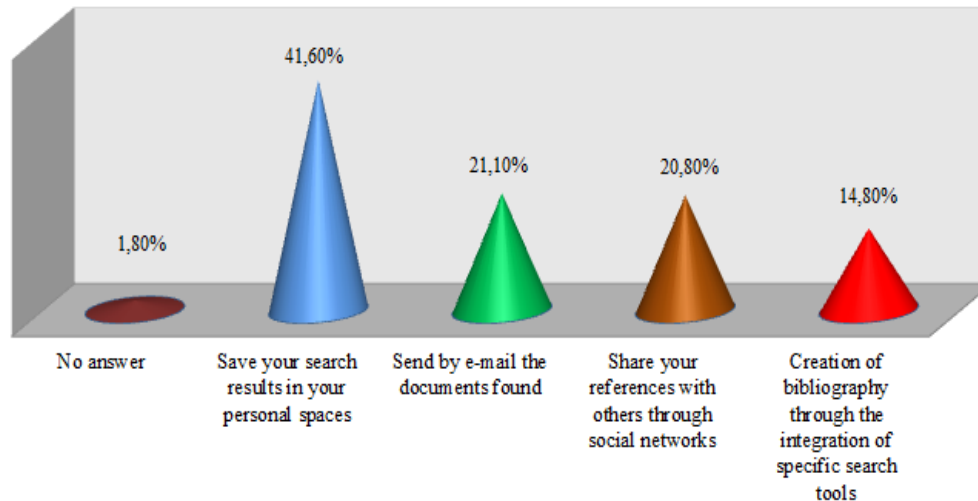
An important rate (21%) of users wish to have a copy of their documents found, while transmitting them in their own electronic mail; then share them with others, through social networking. We see from this result that, there is a strong desire to create this culture of exchange, collaboration and knowledge sharing among academics and researchers.

But, we have only 15% who are interested in the creation of the bibliography, through the integration of specific tools, as (ZOTERO and End

Note) (Figure 6). We can argue that these two types of tools are not very developed in this university community.

We recall that scientific events such as seminars have already been held in this direction³. It must be mentioned that it is essential to download, by introducing the bibliographic data in this type of support tools for students and teacher-researchers in order to facilitate their research.

Figure 6. *Search of Results*



Conclusion

Through this investigation within a library of the Higher National school of Veterinary of Algiers, we can understand clearly the behavior and the relationship of users with this library. This study has allowed us to know the level of integration of these users to ICTs in this new digital age.

In a study that we conducted (Bernaoui and Hassoun, 2012) on «Academic libraries face the Algerian Digital: New communication behaviors», we found that among remote collaboration tools that professionals have little interest we pointe the chat as asynchronous collaborative (14%), videoconferencing (6%) and e-learning. Although these devices can act on the creation of international socio-scientific networks. This neglect causes weakness of internal and external collaboration between professionals for the transfer of knowledge and skills.

Therefore, the users of the library of the ENSV confirm their crucial need for the establishment of a digital library that could answer to their expectations and needs through the different digital services and products which must be

³ - Organization of a seminar on "collaborative tools and the base of Thomson Reuters ISI Web of Data". Algiers , ENSV, April 21 , 2012. This seminar is part of the teaching of research methodology module to conduct a research project (PhD thesis) for the magister and doctoral students.

- Organization a training on the use of the tools of information retrieval (National Documentation System Online and Web of Science, End Note). Algiers , ENSV, 4 and 5 December 2013.

offer for management, exchange and sharing of knowledge in the field of veterinary science.

According to our results, in the end of one study of «Principles for digital library development» the authors confirm the necessity of the open access of knowledge by saying that «*Finally, we need to strive for continued open access to all knowledge. There is no better time to start than now and no better place to start than with our own valuable collections*» (McCray and Gallagher, 2001).

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