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THE DEVELOPMENT OF INFORMATION SEARCH SKILLS BY MEANS OF BIBLIOGRAPHIC DATABASES FOR FIRST-TIME HIGHER EDUCATION STUDENTS

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Abstract: With the emergence of Information and Communication Technologies (ICT) and the Internet, the production of information has increased exponentially and its management and organization has become more difficult. One way of organizing scientific information has been through bibliographic databases, which allow quick access to it. The objective of this work was to show the importance of developing skills in the search for information in bibliographic databases by higher education students. The methodology used was of a mixed type, applied to a first semester group consisting of 30 students of the Educational Administration course for the period 2022-2, after having taught them how to use the following databases: Scielo, Redalyc, Google Scholar, Dialnet, and UPN Catalog. The technique of participant observation was applied to verify their learning, the data collection was done virtually through Google Forms. 100% of the students surveyed considered these databases as important for their academic future due to their veracity and reliability, with 73.3% leaning towards Redalyc and Scielo, 50% mentioning that they would use them for their degree work, while 26.6% would use them for research work and school assignments. It can be said that developing students' skills in the search for information in various bibliographic databases can have a positive impact on their academic future and that it is necessary that all higher education institutions provide students with these skills, which should be applied from the first semesters of their professional training for their best use.
Keywords: Information seeking; Higher education; Bibliographic databases; Information skills

INTRODUCTION

One of the fundamental skills that every student of higher education should have from the first years of their professional training is the search for information in reliable sources of information. They must know how to distinguish when a source contains unreliable information, and be aware that knowing how to search for information will be a very helpful skill for their professional practice and future life.

One of the sources of scientific information that every student of higher education should know how to handle, are the databases, which briefly describe various types of documents whose support is given in electronic form. To access the existing information in many databases has a cost that sometimes is high. However, at the beginning of this century there has been a firm intention to facilitate its access free of charge, some of these are: Redalyc, Scielo, Dialnet, Google academic, which have been taken as a basis for the conduct of this research, as well as the catalog of the Library of the UPN, when teaching a group of students of first entry to higher education its use and advantages.

THE USE OF INFORMATION BY THE HIGHER EDUCATION STUDENT

Information and Communication Technologies (ICT) have had a great development in the last years of the twentieth century and the beginning of this one; we live in what has been called "Information " or "Knowledge Society" impacting all areas of human life such as: health, finance, industry, government, communications and especially education at all levels. In today's world, it is necessary that students know how to use these technologies so that they can actively participate in society and can easily insert themselves into the labor market (Unesco, 2014). In addition to the handling of ICT, it is also necessary that higher education

students know how to use scientific information from their first years of professional training, learning to differentiate the sources that provide reliable information from those that produce dubious information, generating in them scientific thinking, making them capable of carrying out documented research work (Gutiérrez, 2002).

This learning also brings some skills such as: the ability to solve problems, critical thinking, as well as the management of methodologies to be self-taught, which allows him to be permanently updated in his professional field (Gutiérrez, 2002).

According to Ospina, Reveiz and Cardona (2005), each year approximately 17,000 books and 30,000 issues of scientific journals are added to the world's collection, as well as more than 1,000 science-related databases, which are important resources for scientific communication.

DATABASES

According to the definition given by the University of Cantabria (2012) databases can be defined as:

> Massive information sources in electronic support, composed of records (references, etc.) that briefly describe documents (journal articles, books, periodicals, reports, congress communications, patents, electronic texts, etc.), providing their identifying data (authors, titles, source, publisher, dates, language, type of publication, etc.) and informing about their content (subjects, keywords, classification, summary). They are indexes that make it possible to crawl the deep and quality Internet. They are often paid, because of their high value, but they are also freely available on the Internet. They can be more or less general or specialized in their subject (engineering, polymers, geography) or type of documents they cover (journal articles, theses, patents, legislation, etc.). Sometimes they even include or link to the documents they describe (to the full texts) (p. 38).

Almost all databases can be consulted on the Internet free of charge, although this has not always been the case since in most cases it has been necessary to be a subscriber and pay a high cost to consult them. However, in December 2001, an initiative called the Budapest Open Access Initiative, sponsored by the Open Society Institute (OSI), was launched. In this initiative, it was proposed to make efforts at the international level to provide free access to research articles in all areas of knowledge through the Internet in order to support researchers and research institutions (Bermúdez, 2011).

There are currently numerous databases that allow free access to scientific information. Some of them that stand out at the Ibero-American level are the following:

SCIELO

It originated in June 1998 in Brazil and initially included ten Brazilian journals, gradually incorporating others, as well as some Latin American countries. It is currently formed as a network including the following countries: Argentina, Brazil, Chile, Colombia, Cuba, Spain, Portugal, Venezuela, South Africa, Mexico, Costa Rica and Peru and in the development phase Uruguay, Paraguay and Bolivia. Its objectives are to increase and sustain the visibility, accessibility, quality, use and impact of scientific journals (Caballero, Marenco, Martínez, Monroy, Palencia and Rodríguez, 2008).

REDALYC

Created in 2003 by a group of researchers from the Autonomous University of the State of Mexico (UAEM) specialized in the area of social sciences, it contains the scientific production of and about Ibero-American countries. Its objective is to promote journals published in the region to induce their visibility and impact (Aguado, Rogel and Baca, 2011).

ACADEMIC GOOGLE

It was created on November 20, 2004. It allows locating academic information contained in articles, theses, books, patents, conferences. It draws on information from university publishers, professional associations, university repositories and other academic institutions (https://biblioguias.uam.es/tutoriales/google_academico).

DIALNET

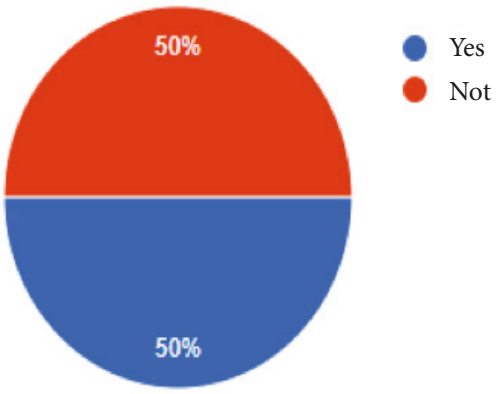
Founded by the University of La Rioja in 2002, considered from the beginning as a platform open to library cooperation; since 2004 it has become a repository through which you can access information stored in various databases worldwide. Its purpose is to support full-text access to scientific research production of various publications such as: journal articles, book chapters, doctoral theses, books and more (https://soporte.dialnet.unirioja.es/portal/es/kb/articles/qu%C3%A9-es-dialnet).

METHODOLOGY

Mixed research applied to a first semester group consisting of 30 students of the Educational Administration career for the period 2022-2. The observation technique was applied and the data collection was carried out virtually by means of Google Forms.

RESULTS

Of the schools of origin, the majority belonged to the Colegio de Bachilleres, the Colegio Nacional de Educación Profesional Técnica (CONALEP) and the Centros de Estudios Tecnológico Industrial y de Servicios (CETIS), with a total of 16 (53.3%) students 15 (50 %) of the respondents mentioned having taken a subject on "Research methodology".



Graph 1 Students' response to having taken a subject related to "Research Methodology".

Own elaboration

Seventy percent, i.e., 21 students said they had had some instruction on information search and 9 (30 %) students mentioned that they had not.

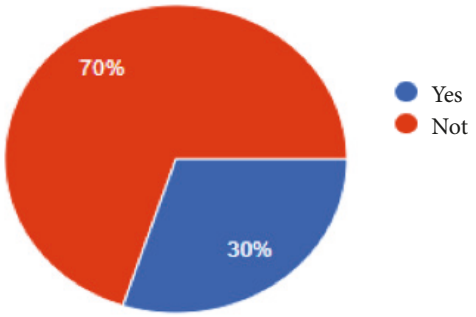
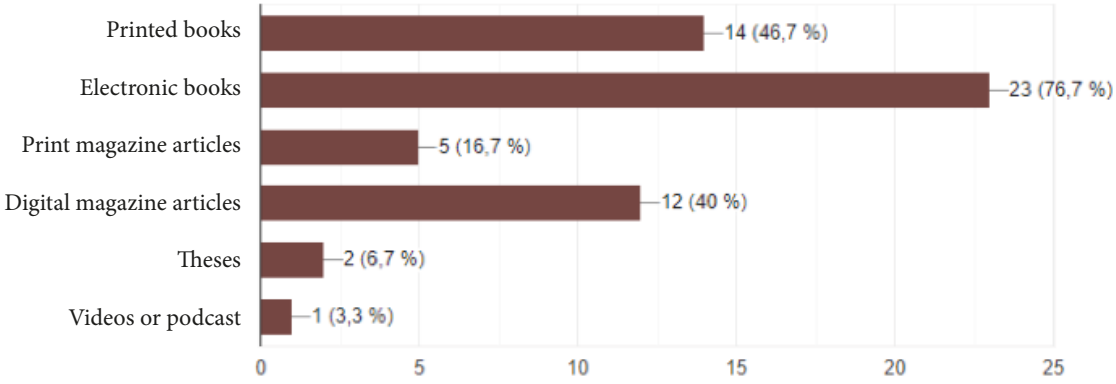


Figure 2 Instruction on "Searching for documentary information

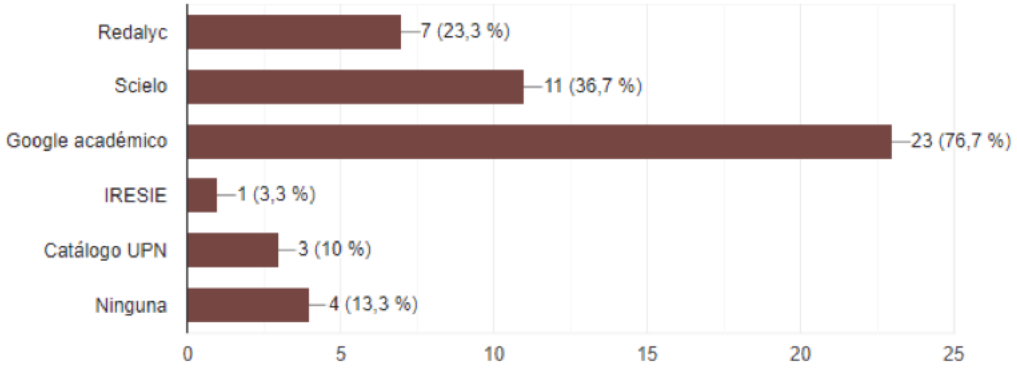
Own elaboration

It could be seen that the documentary material that students are most interested in using still prevails the use of printed books with 14 (46.7 %) students; 5 (16.7 %) students said they use articles from printed magazines; however, the results allow us to see that there is a huge inclination for the use of digital material 23 (76.7 %) students said they have a preference for electronic books; 12 (40 %) students mentioned using more frequently articles from magazines in digital format.



Graph 3 Most frequently used documentary resources

Own elaboration



Graph 4 Databases already known to students

Own elaboration

Once the functioning of the various information systems was seen in class 23 (76.7%) students mentioned that they already knew Google Scholar; 11 (36.7 %) knew Scielo; 7 (23.3%) used Redalyc; to a lesser extent, 3 (10 %) knew the UPN catalog; 1 (3.3) had used Iresie; while 4 (13.3 %) students did not know any of them.

Among the reasons for which they mentioned that they found it easy to use, the following stand out: Its easy access; with searches they obtain articles or journals; it allows them to research and obtain more information; it allows them to download information by PDF; because of its ease to enter the system; a single search gives related results and it contains very good information.

Of the information systems they were most inclined to continue using in the future were Redalyc and Scielo, with 22 (73.3 %) of the students preferring them; to a lesser extent, 6 (20 %) preferred Google Scholar and, to a lesser extent, the UPN catalog and Dialnet with 3 (10 %) students.

In this research they were also asked about the future use they would give to these information systems obtaining that 15 (50 %) of the students said they would use them for their thesis work; 7 (23 %) would use them for research work; 4 (13.3 %) would use them for school work; 4 (13.3 %) students would use them for general work or work of personal interest.

All 30 (100%) students considered these databases as important for their academic future.

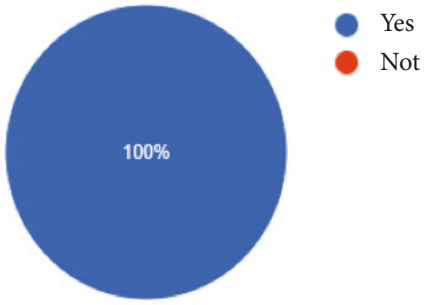


Figure 5 Importance of databases for future academics

Own elaboration

For the following reasons: for their veracity and reliability; they are information systems to support the career they are studying; they can be used to consult a topic for research; because an educational administrator must know how to navigate and search for scientific information; they contain information that will be useful for future research that they will be asked to do in different subjects of the career.

CONCLUSIONS

The results showed that there is still a great inclination on the part of the students for the use of printed material, however, a wide inclination for digital was also found. An advantage that was seen with this research was that a high percentage of the students had had some instruction in information search, which facilitated the understanding of the subject. The results showed that the students considered it important to know how to handle databases for their professional training because they are reliable and contain truthful information, which is why it is necessary to develop in higher education students the skills to search for information through databases, which can have a positive impact on their professional training and on their academic and professional future.

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