Fortalecimiento de competencias digitales en estudiantes de medicina para búsqueda de información especializada

Strengthening of digital skills in medical students for specialized information searching

Magallanes Rodríguez Ana Gabriela
Universidad Autónoma de Baja California
gaby_magallanes@hotmail.com

Candolfi Arballo Ofelia
Universidad Autónoma de Baja California
ocandolfi@uabc.edu.mx

Castillo Martínez Nydia Alejandra
Universidad Autónoma de Baja California
nydia.castillo@uabs.edu.mx

Resumen

El uso de Internet y la infinita información a que se tiene acceso ha generado múltiples cambios en la sociedad contemporánea, impactando los procesos de aprendizaje a través del desarrollo inevitable de destrezas tecnológicas. Se establecen diferentes procesos de orden intelectual para la resolución de una actividad o tarea, en los que el estudiante debe incluir los recursos técnicos con los que cuenta y que son parte de su contexto social y cultural. La presente investigación se dirige a conocer los hábitos que tienen los estudiantes de la Licenciatura en Medicina respecto al uso de internet como recurso principal para la búsqueda y selección de información en fuentes especializas dentro de su actividad académica en el marco de su desarrollo profesional.

Palabras clave: internet, educación superior, medicina

Abstract

The use of the Internet and the infinite information that is accessed has generated many changes in contemporary society, impacting the learning process through the inevitable development of technology skills. Different processes are established intellectual order for the resolution of an activity or task, in which the student must include the technical resources are there and are part of their social and cultural context. This research is aimed to know the habits that have students of the Bachelor of Medicine regarding the use of Internet as a primary resource for searching and selecting information sources specialize in academic activity within the framework of their professional development.

Key words: Internet, higher education, medicine

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Introduction

In 1998, the United Nations Educational, Scientific and Cultural Organization (UNESCO) held in Paris, France the World Conference on Higher Education called Higher Education in the 21st Century, Vision and Action, with the objective of organizing the necessary activities for the change and development of higher education worldwide, pursuing a substantial reform that responds to the demands of the world of work that the newly trained professional must face, without ceasing to address the challenge implied by the differences in the social and economic conditions of each country and that consequently separate the results in the quality of education.

The need to address the evolution of technological resources to which society has access and the obligation to insert them in the field of education occurs because Information and Communication Technologies for Knowledge (ICT) represent multiple options for the strengthening of higher education. The resources offered by ICTs favor in young people the generation of thought processes and the solution of varied and innovative problems, being precisely they the main agent of modification in teaching and educational models.

The use of technology in any of its modalities has therefore become an integral aspect of the educational process.

The research presented is carried out with students of the Bachelor of Medicine at the Center for Health Sciences (CISALUD), Valle de las Palmas Unit at the Autonomous University of Baja California (UABC), Mexico.

Goals:

To identify what is the use of the Internet to search for information carried out by medical students of the Health Sciences Center of the Autonomous University of Baja California, Valle de las Palmas Unit.

An instrument was designed and applied to evaluate the use of the Internet to 89 second-semester students to explore the practices and frequency of use, knowledge about operations to optimize the resource, and usual management techniques.

Materials and methods:

This research is carried out in the Mexican Republic, in the state of Baja California, within a community of young university students who study the subject called Research Methodology as part of their Bachelor of Medicine studies at the Center for Health Sciences. of the Valle de las Palmas academic unit, which is part of the Autonomous University of Baja California.

The axis of the work lies in the infinite amount of information that is available, without all of it being of a scientific nature or validity. The Internet user must learn to discern and use the resource appropriately to achieve a significant result.

For this work, students of the Bachelor of Medicine have been chosen, who attend the Research Methodology subject, whose content is a central subject for the professional in the health area, since it implies basic knowledge of the initial stage of training that will be used during the rest of the academic training and professional practice.

For the development of this research, it is considered pertinent to use a mainly quantitative method, the selected design is descriptive, respecting the ordinary behavior of the dynamics of the teacher and the student. This design is understood as the determined strategy for capturing the necessary information and thus fulfilling the general objective. This is a cross-sectional study, as it is limited to a specific period corresponding to the 2011-1 cycle, which includes February to May of the current year.

The sample is limited to those regular students who take the Research Methodology subject, which corresponds to the basic stage of training in the second semester of the Bachelor of Medicine.

The sample is made up of 79 students, 31 men and 48 women, aged between 17 and 30 years. The selection of the sample is directed, integrating those students who adhere to the characteristics demanded by the phenomenon to be studied.

The information is obtained through the preparation and application of a questionnaire that is clear and simple to answer, as well as feasible to be self-administered.

The questionnaire consists of a single page, made up of fifteen questions about the use of the Internet, in addition to exploring the sex and age of the respondent. Items are included that offer information about the habits, training, preferences and knowledge that students have in relation to the search for information in the area of health through the Internet. The maximum time required to answer is five minutes, since it is structured with minimal variations in complexity.

Results:

It is questioned about the fact of using the Internet, without frequency or preference exploration, that is, it was only intended to know if they use it or not. It is identified that 94% (74) indicate yes, while the rest (5, women) indicate the opposite, the subsequent

responses of this smaller group are canceled for the analysis because they are considered incongruous with this reagent, which invalidates the generality of the instrument in these cases. The sample is then reduced to 74 applications.

When exploring the subscription of students to online scientific journals, a significant discrepancy by gender is appreciated, where men indicate having a greater use of this resource, since 74% mention participating in it, while only 30% of women, who are the majority in the present study, carry out this activity. In general, 48% of students say they have an electronic subscription to a scientific journal. Participation in a research project in the current period is addressed, to which 50% of the group of students considers that they currently carry out this activity, pointing out the one corresponding to the subject of Research Methodology, which they are developing as part of the activity of matter. Consequently, the remaining 50% indicate that they do not participate at the moment. This data, when broken down by gender, reflects that 51% of women indicate it as positive, while 49% indicate it as negative. The important thing about this information is that the reagent explores the student's perception of an activity that all the respondents are developing; it is significant, therefore, that half of them do not identify it.

The frequency with which students access the Internet is concentrated in 92% who do so daily, 6% from 4 to 7 times per week, 1% use it from 1 to 3 times per week and the remaining 1% from 4 to 7 times per month. Which confirms its recurring use.
The subsequent answers indicate the way in which the student relates the use of the Internet with his studies, mainly searching for information by 52%, followed by clarification of doubts (25%), expanding class information (21%) and the rest for do exercises that strengthen knowledge and the search for curious facts (2%).

The previous information has a significant link with the criteria that the student uses when choosing the information that will be used as support in their school activity, based primarily on scientific journals (30%) and 36% on documents shown in "pdf" format.

(Portable Document Format, for its acronym in English); 28% prefer pages of specialized institutions and only 6% stay with the first thing that the search engine of their preference throws up as a result.

Finally, the knowledge that students have about the various sites that they are expected to know and use as significant sources of information in relation to the area of health was explored, obtaining the following:

Table 1.

Sitio	% de usuarios
SCIELO (Scientific Electronic Library Online)	**41**
EBSCO (ELTHON B STEPFEN CO.)	**30**
PUBMED (MEDLINE)	11
IM (Index Medicus)	10
LILACS	3
COLCIENCIAS (Fondo Colombiano de Investigaciones Científicas y Proyectos Especiales)	1
MD	0
MEDSCAPE	0
MEDLINE	0
Otras (Medigrafía, Redalyc, Science, Nature, MediaPlub, Imbiomed, New England Journal Medical, UCSD, University of Indiana)	4

The main sites recommended by institutions in the health area as basic references for searching for information have not been used by students.

Discussion:

The tool used to collect the information was convenient, it allowed obtaining specific data on the knowledge and preferences of the students in relation to the use of the Internet to search for information.

The necessary data was obtained to support the need to create training or specific education in the use of the resource, so that the student optimizes the projection and scope of the tool.

The voluntary participation of students is important to highlight, because it indicates an attitude of cooperation and feasibility to include innovative activities that strengthen the educational process of which the teacher is a part.

Recognizing the knowledge that they have so far about significant aspects of knowing and related to the profession they study, I consider it an extremely valuable fact, because once the deficiencies or educational needs in the students are known, they can be addressed to correct and stimulate a better academic performance.

Conclusions

Currently there is no educational activity at the university level that is not supported to a greater or lesser degree in Information and Communication Technologies for Knowledge, in this aspect lies mainly the importance of identifying the behavior in the use of the Internet that sustains the student, because it is one of the main support resources to complement or support what corresponds to their educational process.
According to the different theories of learning, the student builds the acquisition of knowledge through different means. This research was developed from the constructivist approach, in which the student takes an active and responsible part in the integration of experience with prior knowledge.

The abundant information in which the student can expand or base his knowledge of it also offers the possibility of presenting as his own what is not. It is in this aspect where it becomes necessary for the teacher to accompany the student in the formation of a scientific criterion, forging at the same time the spirit of a researcher, focused on the problems of his community with the resources that it presents to solve them. It is of vital importance that they develop and acquire values and skills that allow them to discriminate the quality, usefulness and veracity of it.

As long as the student continues to make indiscriminate and unorganized use of the data that she accesses and uses, granting them the validity and scientific nature that they do not regularly contain, it becomes an unimaginable waste of time and resources. The teacher is invited to adapt to the new paradigms that arise before the evolution of technology and society. Inserting them in the educational practice and professional training is decisive to comply with the graduation profile that has been established in response to the needs that the community demands of the health professional.

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