

Internet como herramienta didáctica en la formación académica en alumnos de nivel medio superior

*Internet as a teaching tool in academic formation in Higher Level Education
students*

*Internet como ferramenta de ensino na formação de estudantes acadêmicos de
topo de nível médio*

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Resumen

El siguiente trabajo de investigación se realizó con alumnos de nivel medio superior, asimismo, el objetivo principal es analizar la utilidad que se le da a internet como herramienta didáctica dentro del aprendizaje educativo de los alumnos. De esta manera, se aplicó un cuestionario estructurado con 10 preguntas a una muestra de 192 alumnos conformada por los grados de primero, segundo y tercer año de la preparatoria 14. Finalmente, la información adquirida se procesó en el programa estadístico SPSS versión 19, obteniendo los respectivos resultados. Por lo tanto, Internet ha dado inicio a desarrollar nuevos modelos y estrategias de aprendizaje, para fortalecer la formación de los estudiantes, así pues, el integrar estas herramientas da la oportunidad de ejercer habilidades autodidactas dentro de los campos educativos y seguir con una educación basada en Tecnologías de Información y Comunicación.

Palabras clave: Búsqueda en línea, Educación, Internet, TIC.

Abstract

The following research work was carried out with Higher Level Education students, also, the main objective is to analyze the utility that is given to the internet as a teaching tool within the educational learning. This way, a structured questionnaire with 10 questions was applied to a sample of 192 students formed by the first, second and third degrees of the preparatory #14. Finally, the information gained was processed in the statistical program SPSS version 19, obtaining the respective results. Therefore, Internet has given home to develop new models and learning strategies to strengthen the training of the students, thus integrating these tools gives the opportunity to practise self-taught skills in the educational fields and follow with an education based on Information and Communication Technologies (ICT).

Key words: online search, Education, Internet, Information and Communication Technology (ICT).

Resumo

A presente pesquisa foi realizada com alunos de nível médio, também, o objetivo principal é analisar a utilidade é dada Internet como uma ferramenta de ensino na aprendizagem dos alunos da educação. Assim, um questionário estruturado com 10 perguntas foi aplicado a uma amostra de 192 alunos fizeram-se os graus de primeiro, segundo e terceiro ano do ensino médio 14. Finalmente, as informações obtidas foram processados em SPSS versão 19, obtendo os respectivos resultados. Portanto, a Internet começou a desenvolver novos modelos e estratégias de aprendizagem para fortalecer a formação de estudantes, assim, a integração dessas ferramentas dá a oportunidade de exercitar habilidades autodidatas nos domínios educativo e continuar com uma educação baseada Tecnologia da informação e Comunicação.

Palavras-chave: pesquisa on-line, Educação, Internet, TIC.

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Introduction

The Internet is a powerful tool to help the diffusion of knowledge and education, in fact, is one of the largest sources of information available, it is said that we are in the era of communication and knowledge, hence the importance of this network of networks that currently spans all parts of the world, greatly reducing the time and effort spent in the pursuit of knowledge and information (Pérez and Florido, 2003).

Therefore, the network is a formidable resource to enrich the perspective of our students and analyze, assess, integrate diverse information is the essence of the process of construction of knowledge (Adell, 2004). Foregoing, in Internet you can find information of all kinds, from the most useful to the most unnecessary, trivial and offensive. The way in which we can generate in ourselves the ability to discriminate what information is it that can be useful and which we must dismiss ineffective is another of the issues that are of interest to the authors (Dari, 2004).

Also, the following research work has as main objective, analyze the use of the internet as a teaching tool in the process of educational learning in students of the upper level of the High School #14 of the Autonomous University of Nayarit. In this way, the following hypothesis arises, the Internet is teaching most used tool for the learning process of the students of the upper level of the High School #14 of the Autonomous University of Nayarit.

Thus, applied a structured questionnaire with 10 questions to a sample of 192 students formed by the first, second and third degrees of the preparatory #14. Finally, the information gained was processed in the statistical program SPSS version 19, obtaining the respective results.

Internet: learning tool

Internet has become the technical support necessary for the development of new models of teaching while it is a powerful teaching tool that allows access to a vast amount of information and open new communication channels, breaking, as has been said many times, conceptual spatial and temporal barriers (López and Morcillo, 2007). Certainly there are more and more educational portals on the internet where we can find didactic resources for the classroom, but they are still insufficient - especially in Spanish - and, in most cases, these resources constitute

documents or activities aimed at finding information or to reinforce knowledge within the conceptual framework (López and Morcillo, 2007).

In this way, the Internet stopped being a specialized instrument of the scientific community to transform into an easy-to-use network, modifying the patterns of social interaction, becoming the fastest growing communication instrument. Telematic transformations that foster new forms of education such as interactive education tele-education at a distance through the platform provided by the Internet. So surfers of knowledge arise. It is certainly another society, the knowledge society (Riveros and Mendoza, 2008).

Nowadays, the internet has become the main ICT - information and communication technologies - that is still in use in developed countries, so it becomes metaphorically in the digital oracle of our time, offering us a kaleidoscopic vision of our culture (Aguar and Cuesta, 2009). In this way, the internet, allows breaking this monopoly of knowledge. Any student can access the website or virtual space not only from his teacher, but also to a huge variety of resources, websites, blogs, databases, etc., related to the course he is studying (Area and Adell, 2009).

It is important to mention that the Internet, in particular, and ICT in general terms, are no more than a tool to achieve objectives: to improve teaching and, therefore, to achieve a higher and better academic performance of students. But it must be clear that, like any tool, you have to know how to use it or it can have the opposite effects to the wanted ones (Bausela, 2009).

Therefore, the Internet is a powerful tool within our reach, a virtual meeting place, a means of communication and a source of diverse information, puts at our disposal as teachers a powerful possibility, which is to publish new content and make participants To students in their own learning process from being a passive student who receives the information to an active student who participates in the elaboration of the same (Albarrán, 2010).

Given that, in the current education, internet offers different services that allow to be used by both the students and the teacher to carry out the collection of information for the subject and the teaching of the classes respectively. That is why, through this tool is established a communication and at the same time the students are becoming increasingly familiar with the new technologies. The use of the aforementioned new technologies allows students to develop linguistic,

grammatical and communicative skills, as well as to correct their own mistakes and to express themselves in the best possible way (Contreras, 2010).

It is fair to say that the Royal Spanish Academy included the word "Internet" as a noun in 2006 and defined it as a "global, decentralized computer network, formed by the direct connection between computers or computers through a special protocol of communication." This protocol or common language is called TCP / IP - "Transmission Control Protocol / Internet Protocol" - which performs an information exchange (Conesa, 2010). It should be noted that, the Internet, allows breaking this stereotype of knowledge. Any student can access and exceed in an incalculable way the knowledge of his teacher and, by extension, the rest of the world. In this way students have the possibility to find a huge variety of information that can significantly enrich their learning process (Andrade, 2011).

The truth is that technology has fundamentally changed the process of educating people. Knowledge is no longer reserved for those who have access to information reposing in libraries and faculties. At present, each person must play an active role in their acquisition of knowledge without relying on others, in this way, the internet has the ability to level the field of opportunity for all (Gómez y Macedo, 2011).

It is thus, as we can indicate that the use of the internet in a moderate way becomes something constructive for the student. If there are many times when we worry about the low motivation of students, why not take advantage of the advances that new technologies provide us? (Muñoz, Fragueiro and Ayuso, 2013).

Finally, thanks to the easy access to information, education has been able to make much progress. Nowadays, learning can be achieved if the internet is used as a source of information; however, the comprehension strategies that users use when using the internet are little known (Costa, Cuzzocrea and Nuzzaci, 2014).

Materials and methods

Thus, the following research work is non-experimental descriptive, which was carried out within the classrooms of the 14 high school of the Autonomous University of Nayarit (figure 1).

Figure 1. Students consulting the Internet at the high school computer center 14.



Source: elaboración propia.

Therefore, considering a total population of 383 students enrolled for this school year 2016 in the Preparatory Academic Unit 14. The following statistical formula of finite and known population was used (Murray y Larry, 2009):

$$n = \frac{Z_{\alpha}^2 \cdot N \cdot p \cdot q}{i^2(N - 1) + Z_{\alpha}^2 \cdot p \cdot q}$$

Based on a confidence level (Z) of 95% and a maximum accepted error estimate (i) of 5%, with 50% of population having the desired attribute (p), and with 50% of the population that does not Has the desired attribute (q), a sample (n) of 192 students was obtained.

Also, the instrument used was a structured questionnaire with 10 closed-type questions, which was applied to a sample of 192 students for the first, second and third year of high school 14, who make use of this technological tool to develop Certain academic activities.

It is worth mentioning that in order to achieve the objective of the research, it is necessary to study the following variables: 1.- determine internet access from the students' home, 2.- the type of internet connection, 3.- how he learned to use Internet, 4.- what kind of browser do you use to surf the internet, 5.- how many hours is connected to internet, 6.- where does internet use, 7.-

which search engine constantly uses to search and / or Consult information on the network, 8.- what type of information you consult on the Internet, 9.- cite the information consulted on the internet, 10.- how often the teacher asks you to make use of the technologies.

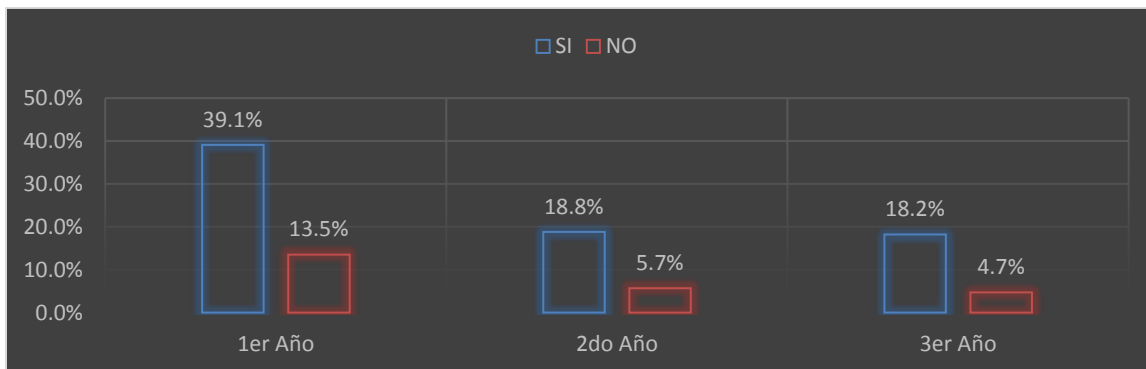
From the above, the information acquired was processed in the statistical program SPSS version 19, obtaining the pertinent contingency tables, and then presenting the data with their respective graphs.

Results

Do you have internet access from your home?

When asked respondents about whether they have access to the internet from home, 76% said yes and 24% said no. Consequently, 39.1% said yes and 13.5% did not, respectively for the first year. For the second year we have that 18.8% answered yes and 5.7% did not. For the third year, 18.2% said yes and 4.7% said no. The importance of having internet in the home is a priority for the development of tasks and consultation of information, while the rest does not have this type of tools in the home making it impossible to access this type of tools, as observed in the Graph 1.

Graph 1. Do you have internet access from your home?



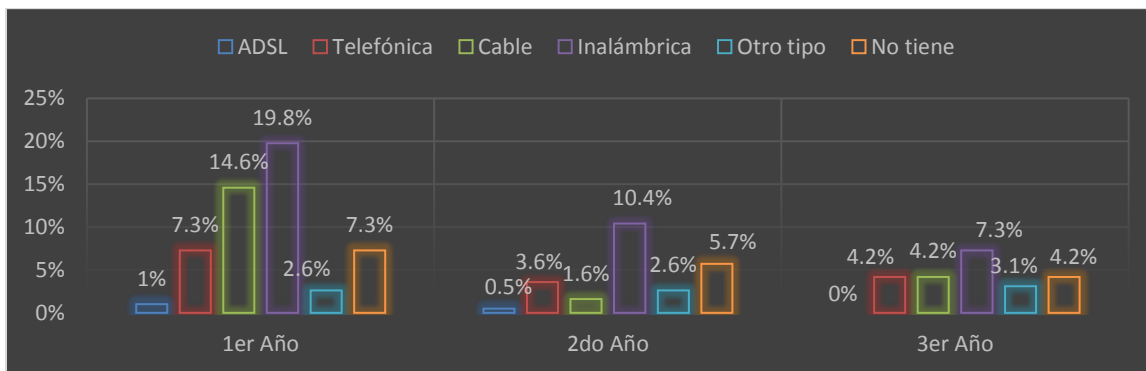
Source: elaboración propia.

What type of connection do you have in your home?

With regard to what type of connection you have in your home the following results are presented. With a total of 1.6% has ADSL connection, 15.1% telephone connection, 20.3% cable connection, 37.5% wireless connection, 8.3% have another type of connection, and 17.2% do not know what type of connection. It is understood that for the first year we have that 1% has ADSL connection, 7.3% with telephone connection, 14.6% with cable connection, 19.8% with wireless connection, 2.6% other type of connection, 7.3% no has. For the second year, we have 0.5% have ADSL connection, 3.6% telephone connection, 1.6% cable connection, 10.4% wireless connection, 2.6% other connection type and 5.7% do not have.

For the third year, 0% ADSL connection, 4.2% telephone connection, 4.2% cable connection, 7.3% wireless connection, 3.1% have another type of connection and 4.2% do not have any type of connection, so , The items with the highest percentage are presented with the cable connection and wireless connection, which is the type of connection people prefer to have in their home, as shown in Graph 2.

Graph 2. What type of connection do you have in your home?



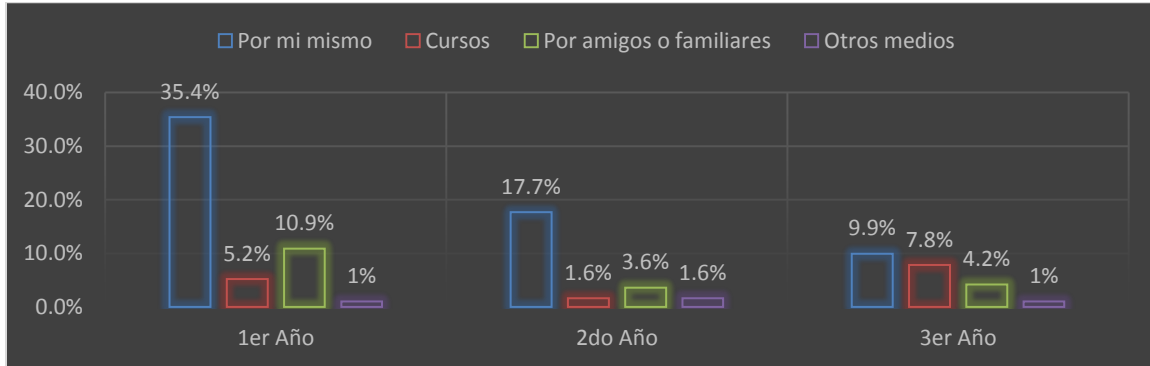
Source: elaboración propia.

How did you learn to use the Internet?

Thus, for the first year 35.4% learned to use the internet for the same, 5.2% for computer courses, 10.9% for friends or relatives, 1% by other means. For second year, 17.7% for the same, 1.6% for computer courses, 3.6% for friends or relatives and 1.6% for other means. Likewise, for the third

year, 9.9% learned by the same, 7.8% by computer courses, 4.2% by friends or relatives and 1% by other means, as shown in Graph 3.

Graph 3. How did you learn to use the Internet?

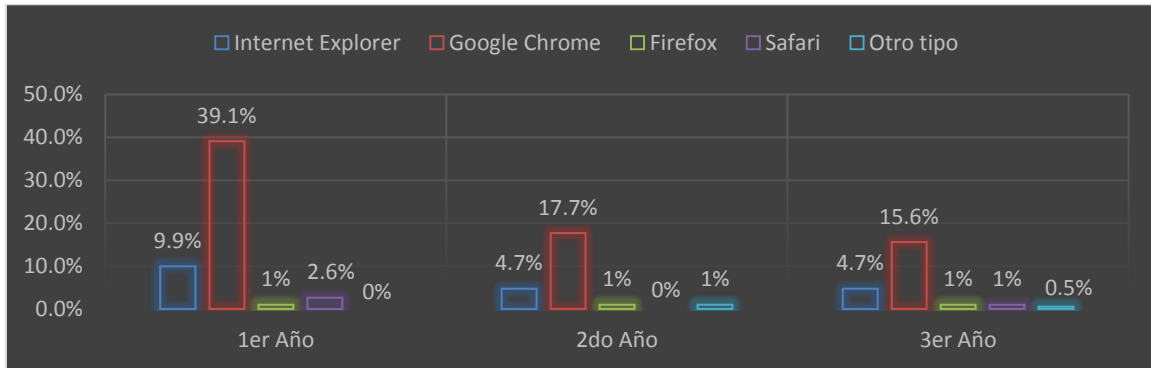


Source: elaboración propia.

What type of browser do you use to make use of the Internet?

This means that 19.3% of the students surveyed use the Internet Explorer browser, 72.4% Google Chrome, 3.1% Firefox, 3.6% Safari, and 1.6% use another browser. Which means that 9.9% use Internet Explorer, 39.1% Google Chrome, 1% Firefox, 2.6% Safari, corresponding to the first year. For the second year, 4.7% use Internet Explorer, 17.7% Google Chrome, 1% Firefox, 1% use another browser. For the third year, 4.7% use Internet Explorer, 15.6% Google Chrome, 1% Firefox, 1% Safari, 0.5% use another browser. It should be noted that students prefer to use the Google Chrome browser, because it is a reliable and efficient browser within the information query, maintaining an acceptable speed to navigate, and make use of the resources offered by the network, as seen in the Graph 4.

Graph 4. What type of browser do you use to make use of the Internet?

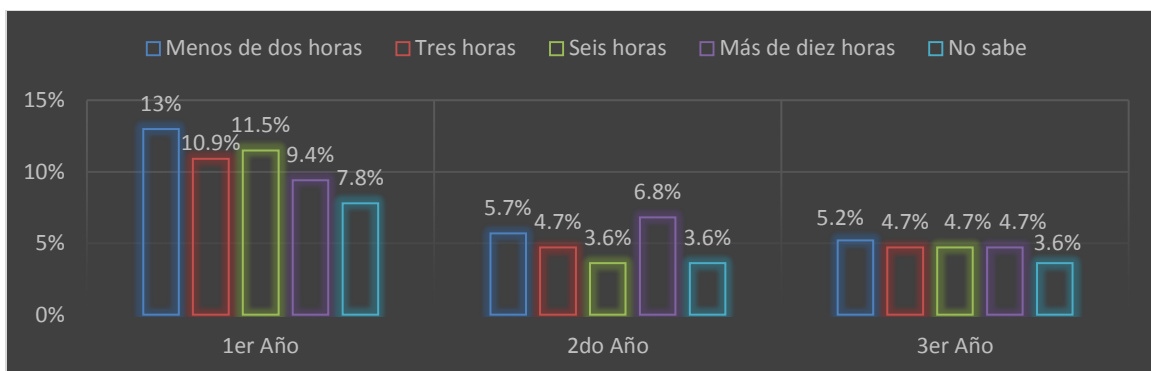


Source: elaboración propia.

How many hours does the Internet connect in the week?

With respect to how many hours the student is connected to the internet in the week the total result is, less than two hours 24%, three hours 20.3%, six hours 19.8%, more than ten hours 20.8%, do not know the 15.1%. Of the above we have that for the first year 13% connects less than two hours, 10.9% three hours, 11.5% six hours, 9.4% more than ten hours, 7.8% do not know. For second year, 5.7% less than two hours, 4.7% three hours, 3.6% six hours, 6.8% more than ten hours, 3.6% do not know. For the third year, 5.2% less than two hours, 4.7% three hours, 4.7% six hours, 4.7% more than ten hours, and 3.6% do not know, we can determine, that more than ten hours the student Makes use of the internet during the week, in the consultation of information and / or in recreational activities outside education, as shown in Graph 5.

Graph 5. ¿Cuántas horas se conecta a Internet en la semana?

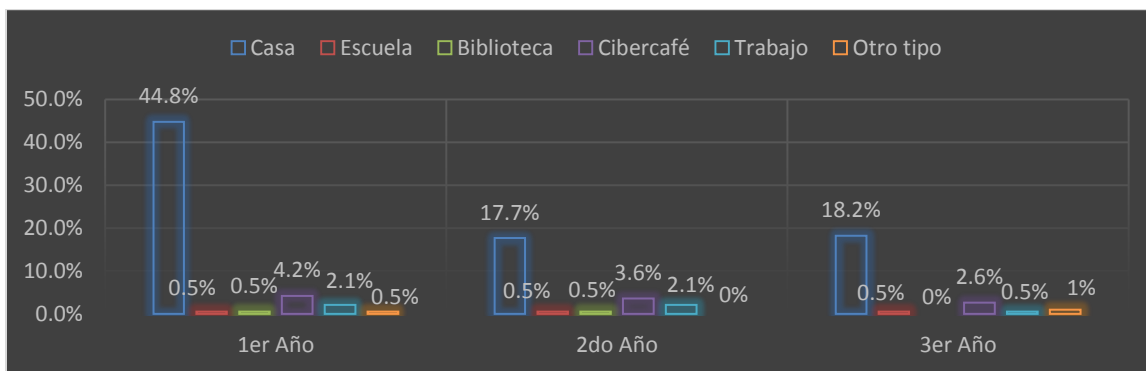


Source: elaboración propia.

In what place do you use the internet to carry out your consultations and / or tasks?

Therefore, for students who made use of the internet from home, for the first year 44.8%, for the second year 17.7%, and for the third year 18.2%, in the school, for the first year 0.5%, 0.5% for Second year and 0.5% for third year, in library for the first year 0.5%, for second year 0.5%. And for the third year does not present results, for students who use in the cybercafe we have that for first year is 4.2%, for second year 3.6% and 2.6% for third year, for students who use the internet from work , For the first year 2.1%, second year 2.1%, and third year 0.5%, and for those who use the internet in another place we have for the first year is 0.5%, second year does not present results, and third year on 1 %, However, it is observed the need of some students who use the internet from another place to develop academic activities as playful, as shown in Graph 6.

Graph 6. In what place do you use the internet to carry out your consultations and / or tasks?



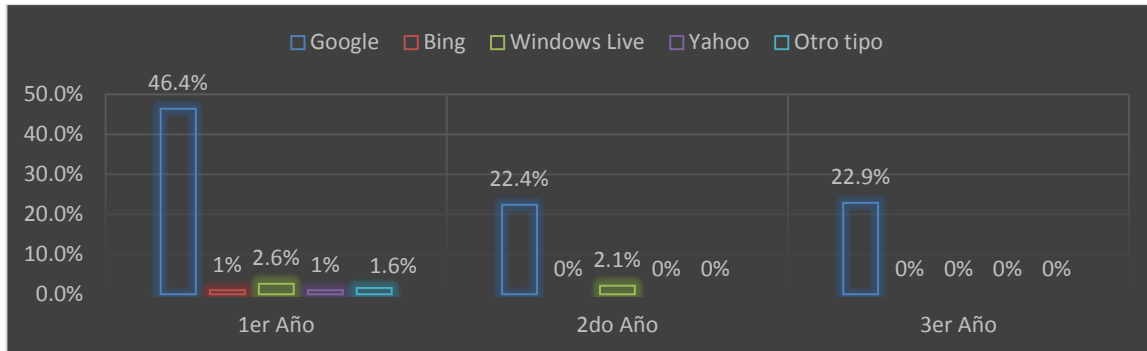
Source: elaboración propia.

Which of these search engines do you constantly use to search and / or query information on the network?

The results presented have a total of 91.7% using Google, 1% Bing, 4.7% Windows Live, 1% Yahoo, and 1.6% use another search engine.

Therefore, for the first year the results are, 46.4% use Google, 1% Bing, 2.6% Windows Live, 1% Yahoo, 1.6% other type of search engine. For second year, 22.4% Google, 0% Bing, 2.1% Windows Live, 0% Yahoo, 0% other type of search engine. And for the third year, 22.9% Google, respectively for Bing, Windows Live, Yahoo, and another type of search engine do not present results, as shown in Graph 7.

Graph 7. Which of these search engines do you constantly use to search and / or query information on the network?

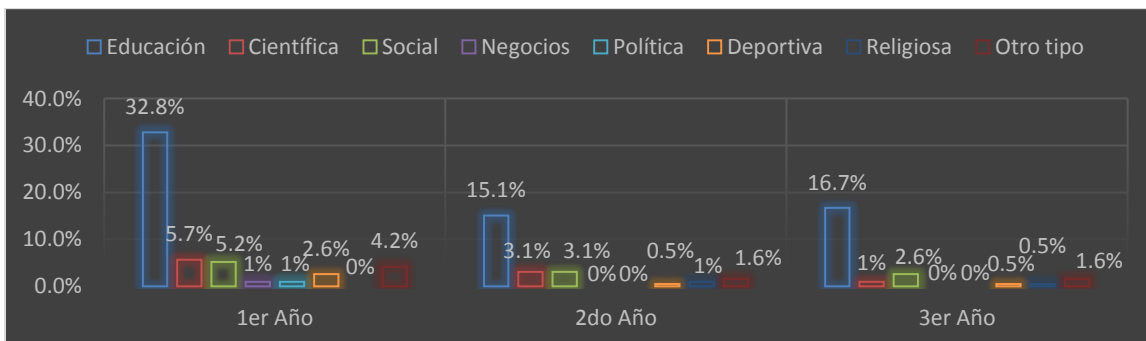


Source: elaboración propia.

What kind of information do you consult on the Internet?

With respect to what information is consulted on the internet we have the following total result, 64.6% consults information of educational type, 9.9% scientific, 10.9% social, 1% business, 1% political, 3.6% sports, 1.6 % Religious, 7.3% other type of information. For the first year, 32.8% consults educational information, 5.7% scientific, 5.2% social, 1% business, 1% political, 2.6% sports, does not consult religious information, 4.2% consult other information. The second year, it presents that 15.1% education, 3.1% scientific, 3.1% social, does not consult, does not consult, 0.5% sports, 1% religious, 1.6% other type of information. For the third year, 16.7% educational, 1% scientific, 2.6% social, does not consult, does not consult, 0.5% sports, 0.5% religious, and 1.6% other type, as shown in Graph 8.

Graph 8. ¿Qué tipo de información consultas en Internet?

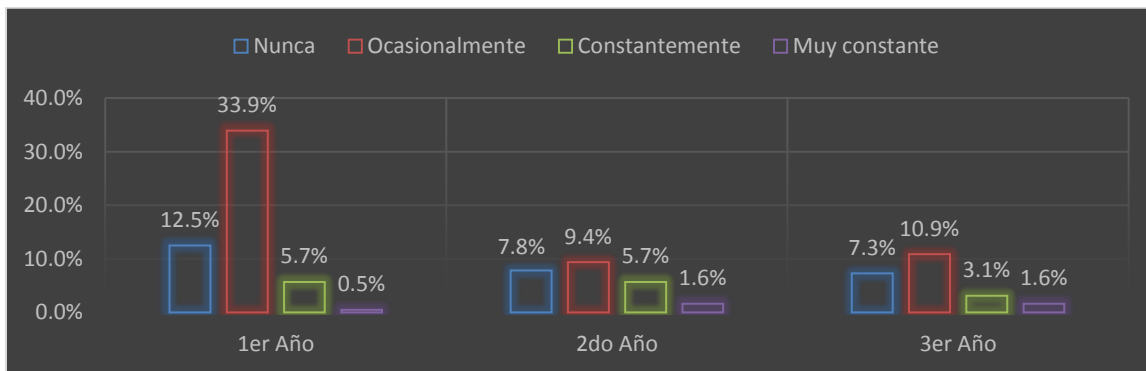


Source: elaboración propia.

When you consult and / or make use of the information that is available on the Internet, do you quote the source?

Of the total number of students surveyed, 27.6% answered that never, 54.2% occasionally, 14.6% constantly, 3.6% very constant. From the above we have that, for the first year, 12.5% responded that never, 33.9% occasionally, 5.7% constantly, 0.5% very constant. The second year, 7.8% responded that never, 9.4% occasionally, 5.7% constantly, 1.6% very constant. For the third year, with 7.3% never, 10.9% occasionally, 3.1% constantly, 1.6% very constant, it is observed that, within the scenario, most students cite the sources of information occasionally, which shows that the Most students are not required to cite the source consulted and give authors credit for the intellectual work presented on the network, as shown in Graph 9.

Graph 9. When you consult and / or make use of the information that is available on the Internet, do you quote the source?



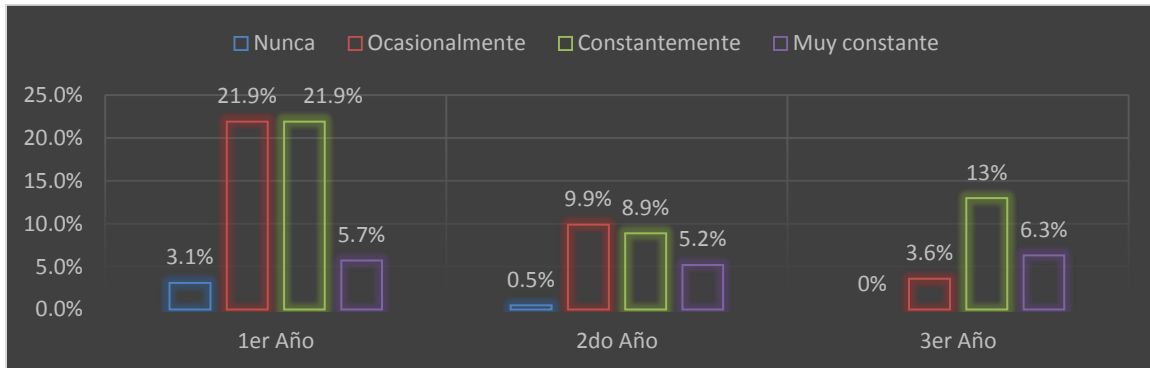
Source: elaboración propia.

How often does the teacher ask you to make use of the technologies - Internet, search engines, programs, tutorials, emails, forums, etc.?

The results obtained were as follows, with a total of 3.6% responding that never, 35.4% responded occasionally, 43.8% constantly, and 17.2% very constantly. The results for first year, 3.1% than ever, 21.9% occasionally, 21.9% constantly, 5.7% very constant. For second year, 0.5% never, 9.9% occasionally, 8.9% constantly, 5.2% very steady. And for the third year, 0% answered that never, 3.6% occasionally, 13% constantly, 6.3% very constant, later the lack of use and teaching of these technologies, has limited both the teacher and student to integrate this type

of Tools in their daily classes, as shown in Graph 10.

Graph 10. How often does the teacher ask you to make use of the technologies - Internet, search engines, programs, tutorials, emails, forums, etc.?



Source: elaboración propia.

Conclusion

Therefore, the Internet can be referred to as the most used and important ICT within the educational environment of high school 14. This is a very significant didactic tool within the academic activities of the upper middle school students.

Also, Araiza (2005) affirms that the use of the internet within education has multiple options; As they are, that students live globalization by exchanging information with any institution or person around the world, developing academic research and establishing a new virtual communication system either synchronous or asynchronous, between their peers and teachers. It should be noted that it is a form of work that, by not requiring physical presence, obviates the difficulties presented by time and space.

From the above, we can observe the transcendence that generates in the students in the query of the same information, using great variety of search engines, as well as the diversity of places to make use of the Internet. It also gives the opportunity to continue with an education based on Information and Communication Technologies.

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