

## **The Impact of ICT on Students of The Preparatory Academic Unit 14 of The Autonomous University of Nayarit**

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**ABSTRACT:** For the following investigation was taken as study area High Academic Unit 14, belonging to the Autonomous University of Nayarit, which aims to determine the level of knowledge and management of Information Technology and Communication -ICT- by students, applying these technologies in various activities inside and outside school. Also, the collection of information involved with the lifting of 101 surveys, consisting of the following questions, 1. How old are you? 2. What is your sex? 3. Do you make use of technologies such as computer, internet, programs, email, social networks, etc.? 4. What place make use of the internet for your questions and / or tasks? 5. In providing Internet services, which often use? 6. To which social networks you connect constantly? 7. Do you think anyone can handle technological tools? 8. Which of these programs you constantly use to your academic activities? 9. The level of use of information technologies and communication - ICT- at your school is? applied to groups of first year for which the data were processed statistically using contingency tables in SPSS 19 program, obtaining as main result a moderate about knowledge and use of ICT impact.

**Keywords:** Administrative management, Educational management, ICT, Social networks, Teaching and learning.

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### **I. INTRODUCTION**

Undoubtedly students contact ICT benefit in several ways and move forward in this new vision of user training. This requires educational activities related to the use, selection, use and organization of information, so that students will trained as a mature citizen of the information society (Salinas, 2004).

Note that in all these aspects computers are currently improving its performance by increasing power of multimedia environments advances in artificial intelligence and the increasingly widespread use of the Internet. So, all these issues constitute a sufficiently broad overview as to foster discussion and reflection among teaching professionals in the early twenty-first century, it will probably be a period of great change in education as a result of the incorporation of the ICT to the world of education (Pontes, 2005).

Also, this research aims to determine the level of knowledge and management of information technology and communication by students applying these technologies in various activities inside and outside school.

### **II. LITERATURE REVIEW**

These are called Information Technology and Communication to the set of technologies that allow the acquisition, production, storage, processing, communication, recording and presentation of information in the form of voice, images and data contained in signals of acoustic nature, optical or electromagnetic. ICT include electronic base that supports the development of telecommunications technology, computer and audiovisual, in this context have the following characteristics of ICT: immateriality, instantaneity and multimedia applications (Rosario, 2006).

According to the possibilities offered by these technologies for interaction with information they are not only quantitative but also qualitative with regard to the use of not only textual information but also other types of codes, from the sound to the visual through audiovisuals. In addition, the syntactic structure and semantics of organizational information that offers ranging from linear sequential, to those who possess hypertext and hypermedia format (Cabero, 2007).

Also, today it has technological equipment that divides school actors process regarding its use; the advantages and disadvantages of computers, convenience or unavoidable use of this device as a tool in the production, circulation and consumption of knowledge are discussed (Castro et al., 2007).

So, these days, especially as a result of the progress of ICT, the school is no longer the privileged channel through which new generations come into contact with information or inserted in the world. That is, children and young people have learned knowledge and skills without adult intervention (Batista et al., 2007).

It is fair to say that ICT, especially the Internet, facilitate scientific exchange can query and display work-experience, facilitates communication, the search for materials by using search engines that easily connect

specialized data base, the pair become valuable tools for collaboration and exchange through communication variants such as: chat, e-mail, etc. (Rodríguez et al., 2007).

Other facilities of ICT as influence education and training, such as the use of computer and video games as teaching aids that allow: that subjects using direct examination as learning mode, and thus are apprentices more active, promoting 'global connectivity', as they allow to come into contact subjects from different places, even different cultures, promoting intercultural exchange in learning, and the use of virtual classrooms and virtual laboratory, promoting access to making practices not always possible in real conditions (Rodríguez et al., 2007).

Therefore, technologies are tools for the dissemination of information, communication and training, influencing all political, economic and social contexts. The use of technology is changing work practices, building new, labor, social and leisure environments, changing lifestyles and forms of social participation, enabling social inclusion. In addition, information and communications technology are enabling the construction of new cultures, social networks through new ways to relate and interact. Therefore, the significant use of technology promotes lifelong learning and continuous training in different educational contexts where technologies as facilitators of learning media are used (Ortega, 2009).

That is how technological innovation in ICT has enabled the creation of new communicative and expressive environments that open up the possibility of developing new training, expressive and educational experiences, making possible the realization of different activities unimaginable until recently. It is understood that, at present the traditional modalities of classroom and distance learning, online learning, using telematic networks that are connected teachers and students to conduct teaching-learning and offers real-time services adds administrative (Ferro et al., 2009).

As is known in our society today, the twenty-first century, which has among its main features an omnipresence in all areas, the mass media, computers and communication networks. It provides the information, increasingly audiovisual, multimedia and hypertext, stores, processes and transports mainly in digital format, with the help of ICT. However, young people meet their needs through ICT, developing between computers, game consoles and all kinds of digital devices. This is not a temporary fad, but a way of life, typical of a generation, before a technological reality (Toro, 2010).

Admittedly entry ICT is a new variable. But perhaps the teachers who introduce are able to appreciate a change in the attitude of students in multiple directions, never explicit to what extent such motivation is evident, possibly because it is a matter of hard study and only recently is being recovered by the science of teaching. That is why; ICT is no better involvement of students in this teaching that includes (Paredes y Dias de Arruda, 2012).

Is defined that the fact investigate the practice developed by teachers and the use of ICT in educational contexts from a qualitative perspective, it is to note that students must maintain an active role in their learning process and the role teacher undergoes a change when applying Technologies, for teachers lies in the responsibility of applying methodologies related to a change and educational innovation (Saez, 2012).

It should be noted that Information and Communications Technologies -ICT- have already made indispensable tools to achieve better welfare conditions and development between people, companies and institutions. For individuals, make the educational process more vivid by offering interactive experiences that encourage creativity and meaningful, active and flexible learning (INEGI, 2013).

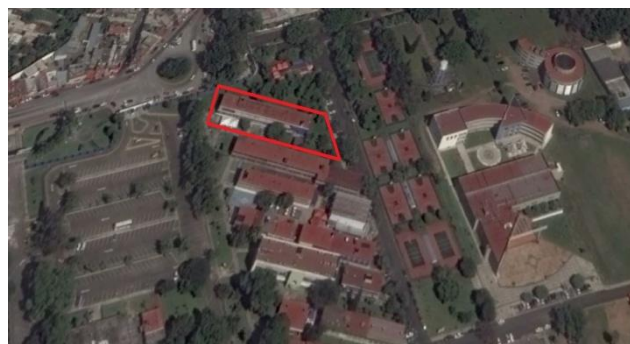
From the above, the use of ICT in the classroom is directly linked to several factors, among which are: the proper functioning of digital computing resources-both hardware and software-, connectivity and internet access, teaching strategies which result in promoting a type of interaction between users and ICT-, digital skills of teachers and students, as well as their attitude towards technology, and the time available in each class to introduce this type of means (Santiago et al., 2013).

### **III. METHODOLOGY**

The following work was done in the Preparatory Academic Unit 14 belonging to the Autonomous University of Nayarit, located in City of Culture Amado Nervo in the city of Tepic, Nayarit, Mexico (Fig. 1 and 2). Therefore, this school is distinguished as a semi-school institution for student workers, has a total population of 383 students enrolled during the 2015-2016 school year. It should be noted that the objective is to know the level of knowledge and use about ICT by students. Thus the collection of information consisted of lifting 101 surveys, consisting of 9 items, applied to the groups the first year, so that the data were processed statistically using contingency tables in SPSS 19 program, then present the results.



**Figure 1.** Geographical location of the Autonomous University of Nayarit. Source: images from Google Earth 2016 drawing.

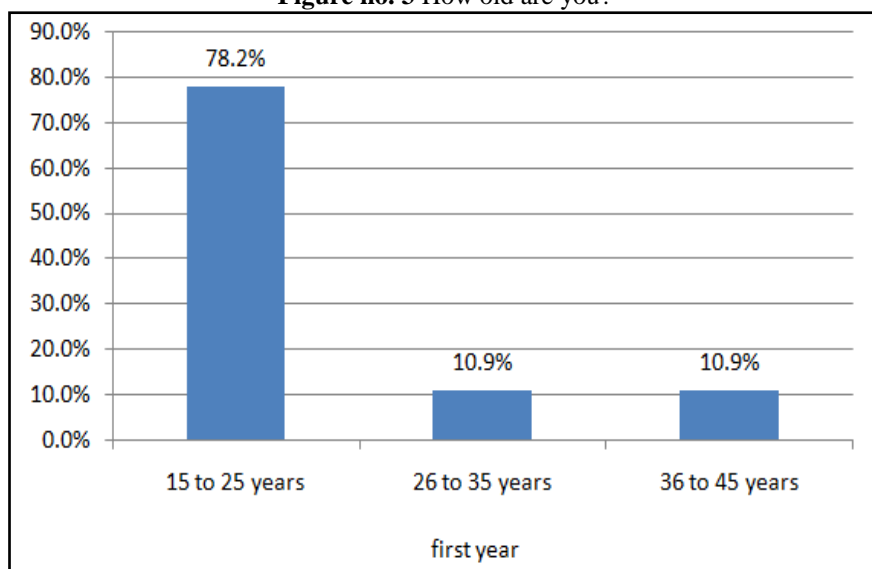


**Figure 2.** Geographical location of the Preparatory Academic Unit 14. Source: images from Google Earth 2016 drawing.

#### IV. DATA ANALYSIS

According to the students surveyed were asked How old are you?, the results were as follows, from 15 to 25 years 78.2% from 26 to 35 years 10.9% and from 36 to 45 years, 10.9%, it is observed that the average age are young people aged 15 to 25 years who most use this type of technological tools, just as are young adults who use ICT for the development of a recreational or academic activity (Fig. 3).

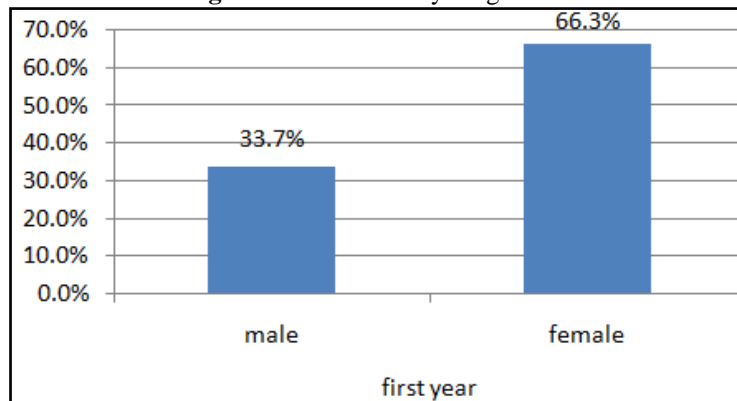
**Figure no. 3** How old are you?



**Source:** Made by myself.

Of the students surveyed have that 33.7% are men and 66.3% women, the results show that use more female students than male use of these technologies, for academic, social activities, etc. (Fig. 4).

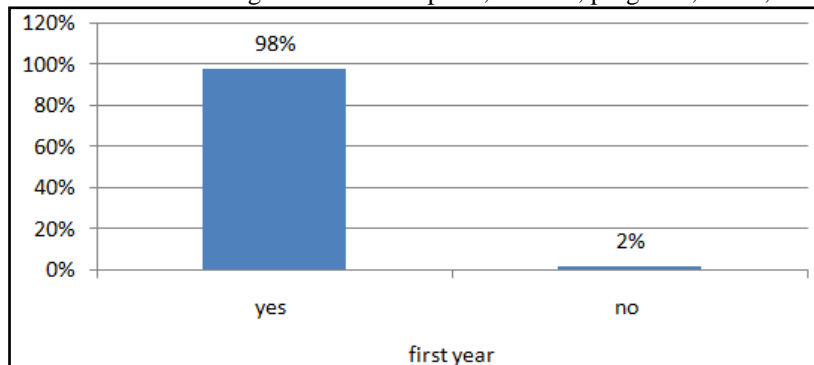
Figure no. 4. What is your gender?



Source: Made by myself.

Do you make use of technologies such as computer, internet, programs, email, social networks, etc.? The following results were obtained, 98% said yes and 2% said no, obviously understood the importance of ICT in daily life, as it becomes a technology that impacts within the activities, labor, education, social therefore shows that within the Academic Unit Preparatory 14, the use of ICT is irrevocable, being a useful tool and integrated in the educational process of the student, (Fig. 5).

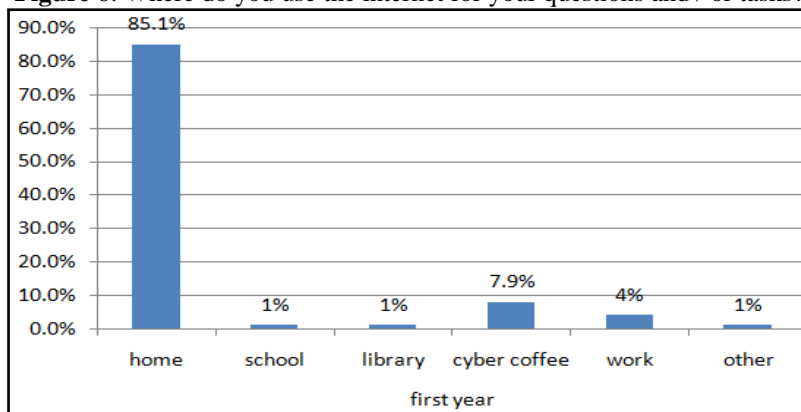
Figure 5. Do you make use of technologies such as computer, internet, programs, email, social networks, etc.?



Source: Made by myself.

Also, students were asked what place you use the internet for your questions and / or tasks ?, according to the results, 85.1% queries from home, 1% at school, 1% in library, 7.9% in the cyber coffee, 4% at work and 1% use the Internet elsewhere. This shows that most students -85.1% - have Internet in their homes, is defined that students make inquiries and / or tasks from the comfort of your home, the rest being -14.9% - do not have internet households, defined that use the services of the same school, library, cyber coffee, work and elsewhere, in particular to access the information provided by this digital network (Fig. 6).

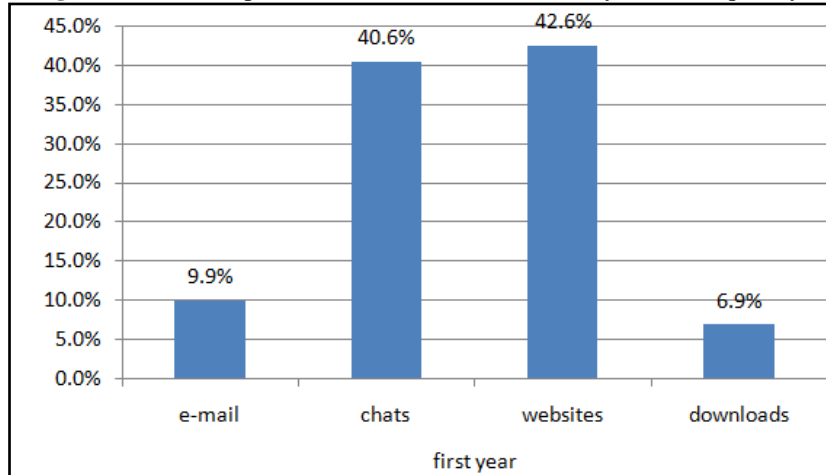
Figure 6. Where do you use the internet for your questions and / or tasks?



Source: Made by myself.

Among the services provided by internet students, 9.9% use email, 40.6% chats, 42.6% use websites, 6.9% use download services, in that order was determined that the services more useful we chat -40.6% -, followed by the web pages -42.6% - also the importance of these services is available to all students generating a wider circulation in the compartment and the same information management, (Fig. 7).

**Figure 7.** How that provides Internet services, which you use frequently?

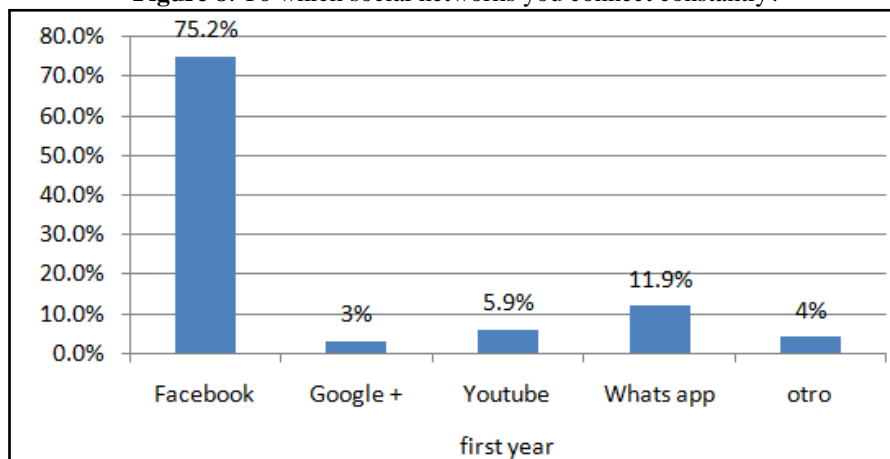


Source: Made by myself.

It is worth mentioning that most students make use of social networks, to develop educational, social, and recreational activities, thanks to the services provided by these social networks that impact in a positive way users in relation to the preponderant activity the use of these same we need, 75.2% connect to Facebook, Google+ 3%, 5.9% to Youtube, 11.9% Whats app, and 4% is connected to other social network.

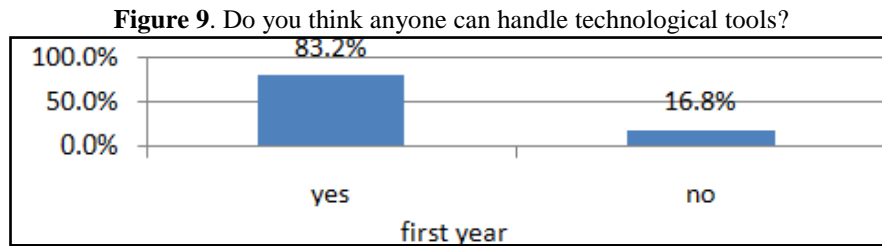
What determines that the vast majority of students make use of Facebook to be a network of great magnitude, giving ease users can connect simultaneously within the virtual world, taking with them great information shared by the various means provided by this so powerful, developing social activities such as work, as we observe, on the other hand network have the social telephony network is present within people, being a resource of great importance and usefulness in the sharing of information, it should be noted the importance of these social networks within the same user environment, then the results of the surveyed students are presented (Fig. 8).

**Figure 8.** To which social networks you connect constantly?



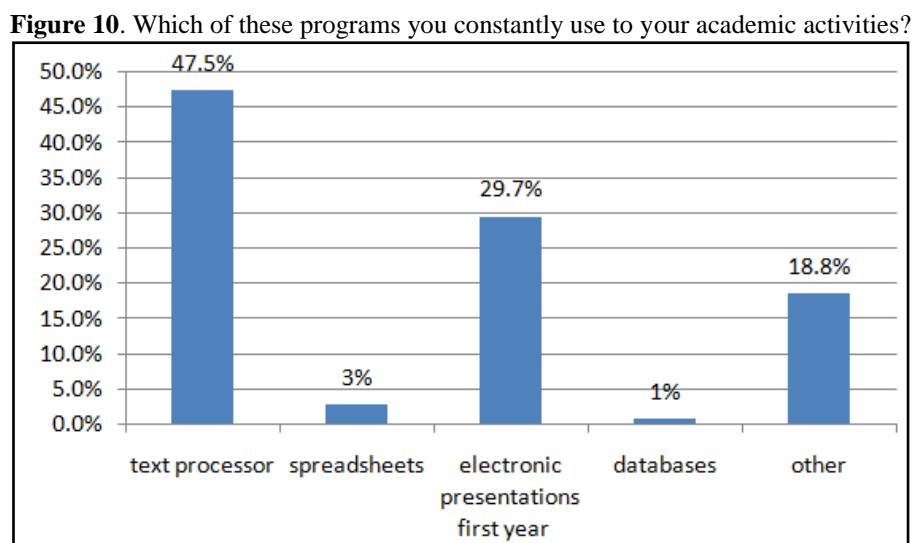
Source: Made by myself.

According to the students asked Do you think anyone can handle technological tools ?, the results were next with 83.2% said yes, 16.8% said no, it should be noted that anyone can make use of this type technology, it is clear that they are accessible to all, this somehow arouses interest in learning to handle these types of tools within the same student, the way society is that owning some form of electronic media such as computer, laptop, tablet, mobile, etc., demonstrates the need to share and receive information transmitted within the network (Fig. 9).



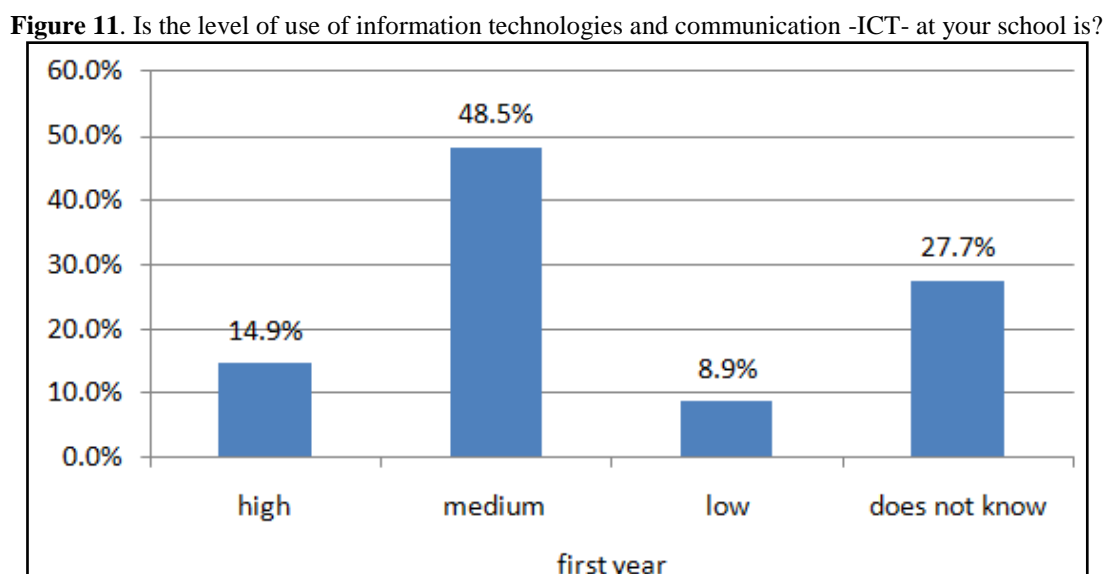
Source: Made by myself.

Which of these programs you constantly use to your academic activities? Different programs used by students in and outside the classroom for work and tasks of different subjects are discussed. 47.5% of students use the text processor, 3% spreadsheets, electronic presentations used 29.7%, 1% databases and 18.8% use other program. The following graphic programs with more proficient in students in developing academic activities is observed (Fig. 10).



Source: Made by myself.

The following graph shows the level of use of information technology and communication in the school, it was mentioned in 14.9% is high, 48.5% average, 8.9% lower, 27.7% do not know. Then the results of the level of use of ICT in school is presented (Fig. 11).



Source: Made by myself.

## V. CONCLUSION

Then we conclude that the results of this research shows that complies with the stated objective, it is determined that the level of use of ICT in the Preparatory Academic Unit no. 14, based on the students surveyed produced the following result, 48.5% responded that the level of use of these technologies within the school is average. However, the student reflects the need to deepen learning and management of these tools, the above, it is the responsibility of the educational institution managing integration and teaching of ICT within the curriculum framework, in addition to providing equipment and adequate infrastructure for the use of these technological resources. Finally, ICTs are useful tools inside and outside the school, providing support for people who use these technologies, thus constituting the information society.

## REFERENCES

- [1] Salinas, J., Innovación docente y uso de las TIC en la enseñanza universitaria. *Revista Universidad y Sociedad del Conocimiento*, Vol. 1, Núm. 1, 2004, 1-16.
- [2] Pontes Pedrajas, A., Aplicaciones de las tecnologías de la información y de la comunicación en la educación científica. Primera parte: funciones y recursos. *Revista Eureka sobre la Enseñanza y Divulgación de las Ciencias*, Vol. 2, Núm. 1, 2005, 2-18.
- [3] Rosario, J., TIC: su uso como herramienta para el fortalecimiento y el desarrollo de la educación virtual, 2006. Disponible en el ARCHIVO del Observatorio para la CiberSociedad en: <http://www.cibersociedad.net/archivo/articulo.php?art=221>
- [4] Cabero Almenara, J., Las necesidades de las TIC en el ámbito educativo: oportunidades, riesgos y necesidades. *Tecnología y Comunicación Educativas*, Vol. 21, Núm. 45, 2007, 5-19.
- [5] Castro, S.; Guzmán, B.; Casado, D., Las tic en los procesos de enseñanza y aprendizaje. *Laurus*, Vol. 13, Núm. 23, 2007, 213-234.
- [6] Batista, M. A.; Celso, V. E.; Usubiaga, G. G.; Minzi, V., Tecnologías de la información y la comunicación en la escuela: trazos, claves y oportunidades para su integración pedagógica. *Buenos Aires: Ministerio de Educación, Ciencia y Tecnología de la Nación*, 2007.
- [7] Rodríguez González, R.; Rodríguez Wong, M. T.; Peteiro Santaya, L. M., Influencia de las TIC (Tecnologías de la Información y la Comunicación) en el desarrollo de la personalidad [en línea]. *Revista Psicología Científica*. 2007 <<http://webcache.googleusercontent.com/search?q=cache:NduOvqV6Lt8J:ww2.educarchile.cl/UserFiles/P0001%255CFile%255Cpsicologia.pdf-273-influencia-de-las-tic-%28tecnologias-de-la-informacion-y-la-comunicacion%29-en-el-de.pdf+%&cd=90&hl=es-419&ct=clnk&gl=mx>> [Consulta: 15 mayo 2016].
- [8] Ortega Sánchez, I., La alfabetización tecnológica. *Revista Electrónica Teoría de la Educación*, Vol. 10, Núm. 2, 2009, 11-24.
- [9] Ferro Soto, C.; Martínez Senra, A. I.; Otero Neira M. C., Ventajas del uso de las TICs en el proceso de enseñanza-aprendizaje desde la óptica de los docentes universitarios españoles. *EDUTEC, Revista Electrónica de Tecnología Educativa*, Núm. 29, 2009, 1-12.
- [10] Toro Gómez, J. M., Las TIC y los nuevos modelos educativos. *Revista Clave XXI. Reflexiones y Experiencias en Educación*, Núm. 1, 2010, 1-10.
- [11] Paredes, J. y Dias de Arruda, R., La motivación del uso de las TIC en la formación de profesorado en educación ambiental. *Ciência & Educação*, Vol. 18, Núm. 2, 2012, 353-368.
- [12] Saez López, J. M., Valoración del impacto que tienen las TIC en educación primaria en los procesos de aprendizaje y en los resultados a través de una triangulación de datos. *Revista Latinoamericana de Tecnología Educativa*, Vol. 11, Núm. 2, 2012, 11-24.
- [13] INEGI. Estadísticas sobre disponibilidad y uso de tecnología de información y comunicaciones en los hogares, 2012. México: INEGI, 2013.
- [14] Santiago Benítez, G.; Caballero Álvarez, R.; Gómez Mayén, D.; Domínguez Cuevas, A., El uso didáctico de las TIC en escuelas de educación básica en México. *Revista Latinoamericana de Estudios Educativos (México)*, Vol. 43, Núm. 3, 2013, 99-131.