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The use of Education from Neurosciences



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Abstract

The general objective of this research is the use of new technologies in education starting from neurosciences since a study of the student must be carried out to identify their abilities and apply new knowledge techniques and generate new learning. Each of the teachers nowadays should consider the use of ICT, as support in the classroom as it allows students to use this software's in the class that contains learning and then generate the same new knowledge that each one can evoke. Whenever necessary. The result that has been obtained is to identify software that contributes significantly to the teaching-learning processes in the different areas since by teaching the chairs with innovation, the interest of the students is aroused.

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1 Introduction

Considering that the human brain plays an important role in the acquisition of new knowledge and the generation of new learning having a preponderant role at the time of storage and evocation as a cognitive process (López, 2000). The first teachings start from the early age when an individual is in the process of pregnancy begins to have feelings with their environment, when born to interact with their parents, this has relevant implications in health and learning processes (Fernández-Rio & Méndez-Giménez, 2016).

The child has the power and ability to interact with the environment, collect, analyze and adapt the information according to their level, and gradually accumulating their abilities and skills in a way that reaches their understanding, it should be noted that this process is slow and progressive and that often requires the contribution of those around the individual such as the family, the school environment and society itself According to (Franco, 2019). In the educational units at present, s are very little used despite having the tools because teachers do not know the management of software (Meneses *et al.*, 2020), so the contents that must be addressed during the school year are not developed or deepened, because these students are unaware of many factors that would enrich the new knowledge generated during class. In this way, constructivism considers learning as the result of the construction that the subject himself performs when interacting with (Saldarriaga, 2016).

There are several types of strategies when using, but for this, you must consider the material that is available to be able to execute the strategies correctly, and that all students can private actively solving correctly the exercises that the teacher poses during your hour. All the experience that people around the child have, such as parents, teachers, and others, has a positive influence from the moment the child observes the behavior of these people, and therefore, by imitating these actions, a great contribution is made to the development of skills and knowledge necessary to achieve full evolution as a social individual Ferreira (2016).

Other factors that cause difficulties when teaching are learning disorders that students may have, some of the most frequent are dyscalculia and TDH. Regarding dyscalculia It should be noted that this problem is not related to the child's degree of intelligence or the strategies or methodology applied by the teacher, this problem is related to the child's ability to interpret the numbers with the set of basic operations, usually leading to the confusion of numbers and signs making it difficult to perform small calculations (Breznitz, 2017). TDH is a neurobiological disorder and individuals reflect the inability to attend, movements and impulsivity when acting; this type of expression sometimes makes learning difficult, for this, it is necessary to draw up innovative strategies to achieve in the students with the presence of this disorder they manage to attend the classes that a teacher teaches (Carbajo, 2016).

2 Materials and Methods

In the educational process, the use of ICT is a tool that allows the acquisition of new knowledge, achieving effective learning that encourages research and encourages students to carry out more creative and truthful academic work. According to Cadavieco and Sevillano, the use of M-learning modifies both the form and the educational contents, which are new methodologies that leave aside the traditional ways of teaching scientific production on augmented reality, an analysis of the situation education from the perspective Scopus (Sevillano, 2016). The methodology of education must be constantly changing, so it is necessary that teachers and students apply TIC in the classroom, looking for students to adopt new ways of learning. It is of vital importance that teachers are trained in the use of TIC, they have tools of various kinds, which are used in the different subjects to be taught to make learning easier and more creative.

According to Claudia Islas Torres, in the age of knowledge, technology is associated with the level of study (Torres, 2017). According to the above, the level of study results in the search for new knowledge, also showing that it is consistent with global advances, that is, the use of technology will give students a better level of study, then the Institutional education should also focus on the constant use of ICT as learning tools. Manifiesta Escontrela, the ancient nature of learning underline as central qualities of abstraction and transfer, in them, that knowledge is applied with the use of the five senses that allow generalization (Escontrela, 2004). These are interesting ways of learning, which does not mean that the use of technological tools is neglected since the use of them will make the absorption and transfer of knowledge effective. Other authors Lucas *et al.* (2019), state the factors that influence school delay and its consequences on academic performance.

Taking into consideration what Lilia de la Torre says, the characteristics of virtual learning, is the fact that the face-to-face act of the teacher and student is not mandatory, chasing the student to see it as something satisfactory and entertaining (Torre & Domínguez, 2012). Currently, teachers become spectators and guide students, which allows the same student to be the protagonist of their learning.

Cognitive processes

Fuenmayor states that cognitive processes are necessary for the constructive and interpretive process of understanding since it is everyone's knowledge that reading implies the interaction between the information obtained and the information stored in the reader's brain, to obtain coherent information (Fuenmayor, 2008). The thinking according to the actors Mejía and Escobar is the ability to analyze, compare. Evaluate, judge, generate new ideas and help solve problems (Quintero & Escobar, 2012).

Sandra Lizardo states that the cognitive process of comparison is promoted in students through the formulation of approaches and questions that point to the establishment of differences between certain aspects of the content worked in the classroom (V., 2006). Lorenzo argues that the basic processes are responsible for the coding of the text, translating a series of graphemes to the phonemes during the coding and autonomous identification of words (Lorenzo, 2001). Lorenzo states that viso-spatial processes are responsible for the visual procedure of the text, in both graphemes are a series of symbols with precise orientation and forms (Lorenzo, 2001).

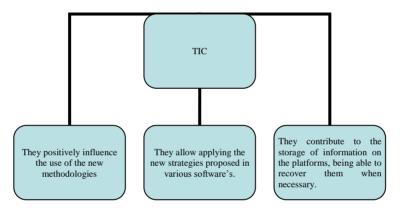


Figure 1. Concept and application

3 Results and Discussions

Teaching methods learning

They constitute the techniques and resources for the teaching process, it can be said that they are vehicles in an orderly and systems way, which aim to make the learning direction more efficient. The TIC can be implemented to improve the teaching-learning process seen by some authors (Mero *et al.*, 2019). In the teaching-learning process, the contents become an end, which in some cases leads the student to memorization and the mechanism, since it fails to form creative and reflective learning, resulting in students with little desire to learn, with boredom due to repetitive work, which the teacher has. That is the importance of the use of teaching methods (Martín, 1998). Within the Teaching-Learning methods, we find several classifications, which are related to each other, depending on the purpose sought (Phillips, 2012). The teacher will have the facility to use the methods and strategies that he considers convenient, without forgetting that the purpose of his use is, to train new knowledge in the students, using the appropriate didactics (Alava & Martinez, 2019; Macías *et al.*, 2018).

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3.1 Methods as to their way of reasoning Deductive method

It is that by tradition they are used more in the teaching process, although it should not be forgotten that for the learning of cognitive strategies, or creation of concepts, they are the least adequate. Deductive reasoning can order what is already known and indicate new relationships as it goes from general to specific, but without becoming a source of new truths (Dávila, 2006).

3.2 Inductive method

It is an active method, which gives rise to scientific discovery. It is based on experience, on parathion, on facts. When the teacher uses this method, he must be careful not to give too many examples that are not too complicated or long, since the student needs to relate it to his experience, without forgetting that the deductive method cannot be excluded (Gabrielsson, 2011).

3.3 The analog or comparative method

It is to reason through analogies, it is about finding two situations or elements that meet similar characterize or similarities to each other, for which we will need a systems and rigorous work that implies the previous definition of properties and attributes possible to be compared, and thus be able to confront the stated properties of the object (Tonon, 2011). The use of this method in the educational field allows the student to discover new knowledge, developing his analysis and reflexive capacity.

The Learning Teaching process has given a great change, giving great importance to each of the roles that both the teacher and the student plays, so that the acquisition of knowledge, the development of skills and values, is associated with method that the teacher selects and uses, depending on the purpose set (Carlos & Elena, 2016). Being this one more tool, which facilitates the teaching-learning process, providing the teacher with techniques and strategies, to reach the desired objective and helping the student to be the protagonist of the class, developing their skills and values.

4 Conclusion

It is important to know that the brain is unknown when trying to know all its functions, but it is relevant to know-how through neurosciences students can be approached and thus facilitate the teaching-learning process. Neuroscience is an interdisciplinary science that has a significant relationship in the use of, as a tool in the process of generating new knowledge. Identify the importance of learning processes contribute greatly to the correct use of s based on learning and memorization of knowledge, to be able to evoke them. Has given a significant contribution to the development, education, of the human being, since through its use new knowledge is generated, in a versatile way and sometimes easier and more fun.

Conflict of interest statement

The authors declared that they have no competing interests.

Statement of authorship

The authors have a responsibility for the conception and design of the study. The authors have approved the final article.

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