

UNIDAD EDUCATIVA JAVIER BACHILLERATO EN CIENCIAS

MONOGRAPH

“Study of technology and its advances in the XXI century in Ecuador.

Influences on education.”

STUDENT NAME:

KARLA SALAZAR GALLARDO

ADVISER

LCDO. MAURO MACKAY

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Gratitude

I want to thank God first for giving me the blessing of being able to study, learn and be filled with wisdom. To my family in second place, they have always been for me the motivation of my daily effort, thank you for allowing me to have an education, a home and food every day. I thank the school Javier for having opened the doors when I enter 6th grade, thanks to the school I have the bases to continue studying and meet my goals, also thanks for giving me friends that I made during school. Thanks to the teachers who helped me and guided me in this investigation.

Summary



This monograph is to be able to inquire a little about the technology, the uses that people offer to it, the benefits that could bring to use it, the advantages and disadvantages, because the technology has several weak points that should be addressed through talks or research so that people do not fall into bad things. We will start from the concepts of technology and its uses in different areas such as home, education and politics, and then talk a little more about technology in education as the main tool in use by adolescents.

Technology also greatly influences people's way of thinking, so we must take into account the use of students' technology, so that they can use it as a method of innovation, creativity, that they can discover more than they do. the school teaches them, as long as they are positive things. In this research we can also know a little about the Tics, which are, so they are used by people and their impacts. Tics are derived from technology, they are effective study methods that people can put into practice for the development of a specific topic. Finally, a survey was conducted to 3BGU students to see certain moments in which technology is applied in their daily lives.

Nowadays technology has advanced so significantly that its use is essential, we can see how people make use of it in common tasks of their daily lives, such as when communicating with each other, looking for their doubts about a topic, etc. This research deals with some topics about technology of common interest, which also talks about whether technology positively or negatively influences adolescents.

And at the end there are several recommendations to which people should be aware of the use of technology, because the technology can't influence in a 100% positive way.

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Introduction

My main idea for my monographic work is “The study of technology and it’s advances in the XXI century in Ecuador. Influences on education”. Technology has become a topic of interest in the last centuries, it is seen as an essential element for the human being. That is why technology has become a topic of interest in the last centuries, it is seen as an essential element for the human being .

That is why the purpose of this topic is to analyze how the technology influences in the children life, how the education takes electronic devices to get better. It’s very important to know how the things changes, and especially if they involve something important like the education. The education had been changing around the last decade, the technology influences a lot in the actual learning. People use the technology in their day to day.

Several studies have been conducted on how technology has been implemented in education like Sanchez (s.f), “One of the subjects of greatest concern to the educational systems is the curricular integration of TICs. Once you have the technology and the teachers learn to use it, the issue that arises is how to integrate it into the curriculum” (p.1).

My work is divided into three chapters in which the first begins by investigating the origin of technology in the nineteenth century, where the word technology comes from and how it is applied in human beings. Then in the next chapter we can observe the pros and cons that technology has in humanity and as a social environment, as well as the impact that arises through it. We also focus on the issue of TICs, their definition, their appearance in society. Finally, we

have the third chapter that refers to the use that society gives to technology through a survey applied to adolescents.

According to Janet Fulk, Charles W. Steinfield (s.f)

“The explosion of new communication technologies has generated widespread controversy over their potential effects on the workplace. Accurate claims of effects must be rooted in valid assumptions about just how the technologies are used. Consequently, media-use behavior has resurfaced as a vibrant area of inquiry” (p.117).

This has nothing to do with technology, but is also present in working life, not only in educational life or in youth life.

Chapter I

The technology

1. Origin of technology in the 21st century

Technology is something that has been present since the human beings had to find new methods in order to subsist. In this last century, technology has improved in a lot of noticeable ways. These improvements are due to the fact that technology goes hand in hand with the drive that humans have to find new solutions to problems that they encounter in life. We can never say that one invention is the decisive one, the one that does not have to undergo other modifications, and this, is simply due to humans having the drive to find new ways to improve in life and consequently improve technology. As human's drive grows, so does the society, and this is why our society has gone under so many changes that have lead us to keep evolving.

1.1. Etymology.

To be able to fully understand this topic, it is very necessary to keep in mind the definition of this word. Technology refers mainly to a capacity created in which the human beings facilitate their efforts in a way that they see necessary so that in the long term, their efforts will be shorten.

1.2. Use of technology.

The use of technology in today's society is very frequent, almost indispensable for any human being. Currently even children under 3 years of age are given electronic devices, have left aside toys, walks in the park, etc. just for spending more time with technology.

According to Botello (2015) "Today, thanks to the Internet, it is possible to carry out many activities that previously required physical presence remotely, and at a significantly lower cost, which allows increasing productivity and economic development within the countries" (p. 13).

1.2.1. In the home.

Some people think that

The technology has penetrated in all human activities in a positive way, but there are many questions about the impact on society due to the significant time devoted to it, especially by young people. Activities such as reading, homework or self-education are relegated by others linked to virtual communication and entertainment. The research underlying this article, held in Quito, Ecuador, has established that young people between 12 and 18 years old, spend per day on average 7h50 to television, the computer, the video game consoles, to music players, to the mobile phone and the landline.

(Franco, 2013, p.107)

Technology at the home has been influenced by the speed with which home purchases can now be made, keep better tracking of what is inside the houses, monitor a daily diet, etc. Also, technology should not be seen as a means to social harm to people but as a benefit for all.

1.2.2. In education.

In education technology has been very helpful in terms of the speed of information search, and not only that, but also in microseconds you can get many sources from which we can extract new knowledge as a basis to build our own argument. Because, although technology helps us to expand our knowledge, we must give it the right use and use it only as a guide. In the past to be able to do a task, you had to read many books in which the answer was not explicit, but now with just typing few words you can have many answers and not have to be reading hundreds of books.

Currently adolescents are very dependent on technology. They are considered digital natives, but it is seen as a positive aspect because they improve the efficiency and performance of students. Also adolescents are more interested in learning through these means.

As Acevedo, Vazquez, Manassero (s.f), said “Any proposal to educate through a subject must begin with a statement of its purposes, since they are a necessary condition to make sense of the process of their learning” (p.1).

1.2.2.1 Benefits.

There are many benefits about the use of technology in education, in which they highlight the speed with which you can know a topic, cost reduction, since you do not need physical material, advantages over students who want to know more about a topic, etc.

According to Vega Gutiérrez (s.f), “the use of technology in the educational space allows the use of more interactive tools that keep students' attention more easily” (p. 1).

1.2.3. In politics.

In politics, technology is not far behind, the persuasion that social networks can have in an electoral process is the main reason why young people get carried away to make decisions when voting. In ancient times there were no technological advances than we have nowadays. Politicians used to go out more to interact with the people, but now through social networks, they can be in communication with the people all the time. But just as it is considered a productive and effective mean, it also has its disadvantages. One of them being when it is desired to damage the integrity of a person, as for example when a politician makes his life too public. The content can be misinterpreted and might even end up reaching the so-called assemblies, and through social networks these gossips reach the whole town, causing the person to usually receive criticism and insults.

According to Barber (1998), “it has been asserted, that modernity can be defined politically by democratic institutions, and socially and culturally by the civilization of technology. But, the relationships between these two components are not free of ambiguities” (p. 6).

Chapter II

Technology in education

2.Impact of technology in education

As already mentioned in the previous chapter, the influence of technology on education has progressed markedly to be part of our day to day

According to Vallejo Antonio (2010)

Information and Communication Technologies (ICT) are living a period of great interest and relevance within the learning curriculum of Secondary Education and, in consequence, it is essential to carry out an analysis on the importance that teachers give to these technologies in the framework of education; to know their skills and attitudes related to ICT and the degree of significance with which ICT are considered by educators, the difficulties and obstacles they find to put them into practice in everyday classes and the uses they make of them in their teaching context

Technology has not only been implemented in education as a new way of educating, it has also become a subject, in which young people learn the good use of it, because it is always in constant change. Social networks have been a great help for communication between students, today they use different media such as Gmail, Hotmail, classroom, etc. In order to have greater communication not only between students, but also between students and teachers.

Technology is present more in the homes of high school students, since they have extensive times of use at school. The current society is cataloged as "the network society".

2.1. Pros and cons of technology in education.

2.1.1. Pros.

Among the pros that technology offers, we must emphasize that the speed with which it provides us with information is effective for the human being, also the number of sources that it provides allows the person to read several points of view to draw their own conclusion, You can do the jobs faster because when you search for the topic, all the sources of just that topic come out, instead you needed to read a whole book to find a single topic. The speed of communication that exists between students and teachers about school matters is very feasible.

According to Shama Pete, Barret Barney (2010), In some cases, the sharing of information is almost instantaneous. For example, a teacher could use Bluetooth to transfer the same content to all students on their mobile phone. An organization could send a ‘text of the day’ with a new word plus translation to thousands of subscribers simultaneously (p. 1)

So is more quickly the communication between people, and it’s better in some cases, you can learn more, you can search and find fast information.

2.1.2. Cons.

As technology is reflected in a positive way, everything has a bad side. In the case of technology, there are different points of view that can be dealt with, fraud or copying is one of them, because people are tempted to laziness and instead of investigating to get their own summaries, only focus on copy and paste, this encourages laziness and does not help in teaching young people.

Technology in this decade is a highly distracting social environment for anyone, whether young or adult, social networks are the main distraction, the way people publish their daily lives makes them too involved, reaching the point of publish every second of your life, this makes people dependent on something material, which is wrong. On the other hand, we have a level of health that is proven that the radiation that the cell emits can cause different diseases such as cancer, because the body is not used to radiofrequency energy and this affects the metabolism.

Another disadvantage that technology has in education is that having the freedom to send jobs at any time, in certain cases teachers send work on days that do not correspond to them, and this creates that the student is forced to do more work what you should in your journey.

According to (Pérez, C., & Joaquín, J., 2015), “the starting point is the evaluation of information and communication technologies (TIC): these are only an instrument characterized by its potential multiplier, in all senses” (p. 1).

Another disadvantage that technology has is that not all the information you need can be obtained for free, there are certain web pages that need subscriptions and charge monthly or annually.

2.2. The technological media in education.

Communication technologies and TICs are highly efficient means in which in the educational field has improved due to rapid communication, without limitation of space where the user is and the low costs it has.

Nowadays, the use of technological tools for information and communication in the educational system has allowed innovations with the generation of new strategies to achieve learning in classrooms. This article aims to prove some basic experiences in the use of social networks, starting with the analysis of the environment in order to achieve an overview of this atmosphere that encourages the investigation of these new advances in technology. The results so far show that the use of social networks in education is a technological strength that contributes to learning and to the construction of knowledge. (Lopez, 2017, p.40).

C., & Carranza Alcántar, M (2012) pose that "social networks have become a tool that allows collaborative learning and involves spaces for information exchange that foster cooperation" (p. 41).

Just as technology is applied in education, it is necessary for the teacher to guide the student's learning, even if he or she has the technology tools.

2.2.1. TIC.

It is a new trend that consists of the use or the implementation of technological tools for the purpose of teaching. As well as this has helped several companies to overcome, improve or even started a business because they are related and made known through it. TICs also improve the learning process through virtual libraries. García-Valcárcel (1998) notes that, "they are all those media that arise from the development of microelectronics, fundamentally video, computer and telecommunications systems" (P. 214).

In the student field, TICs have helped and improved education by allowing the so-called "distance study", and it is very feasible for people who cannot live constantly in a single country but have to mobilize.

TICs also help in education, the dialogue between teachers and students, the way of teaching, since instead of spending time writing on the board, you can have digital jobs that are more entertaining, and the students have more fun learning.

The use of TICs is present in society as a way of recognizing that new means of using information in abundance are needed.

The Tics to be introduced as part of education, must first be part of the curriculum, from the bases or educational principles, because if this is not done, simply its use would be superficially. It was not part of the entire educational process, the methodology that is necessary for the student's facility.

The International Society of Technology in Education (ISTE) defines ICT as the "infusion of TICs as tools to stimulate the learning of a specific content or in a multidisciplinary context.

Use technology in such a way that students learn in ways impossible to visualize previously”
(Sanchez, 2002, p.2).

The curricular integration of the Tics makes reference to the appropriate use of them in education, such as the learning strategy, the pedagogy, the tics support the discipline and curricular content.

As Belloch (s.f) says, "the impact of Information and Communication Technologies (TIC) on education, possibly leads to one of the biggest changes in the field of Education" (pp.1-9)

2.2.2. Classification of media in education.

There are several types of social networks that are present in everyday life, each one is classified in a different way, some by hobbies, professionals, cultural, social movements, etc. In education you can see social networks in which you can share work through platforms or virtual classrooms.

Chapter III

Importance of technology in our times

3.Influences of technology in adolescents

Each person gives a different use to technology, in the case of adolescents on several occasions it is proven that they use technology in a bad way, do not use it as a support material with which to have their own conclusions. On the other hand, we have the constant criticism about the prolonged hours of use of video games and electronic devices. Parents see these means as a waste of time that can be used for the study, the training of their children.

As they say Castellana, Sánchez-Carbonell, Graner and Beranuy (2007), "should not forget the arguments favorable to video games: entertain and entertain; stimulate eye-hand coordination; promote complex cognitive processes such as attention, visual perception, memory

and information sequencing; strategies are acquired to 'learn to learn' in new environments, etc "(p.202). In other words, it also has advantages.

To statistically observe the use of adolescents between 17-18 years old, I conducted a survey of 32 students of the BGU III, in which I was given the following results:

In the surveys we can see that adolescents know almost all of technology, 90.6% always use it, in their daily lives, you also think that today technology is very important.

The most used means of communication are cell phones with 93.7% of 32 responses, followed by laptops with 62.5% of 32 responses, then PCs with 21.9% of 32 responses and finally the tablets with 18.8% of 32 responses.

The 93.8% of the people surveyed agree that technology should be applied in education, and 6.3% disagree. Most people responded that they used technology for entertainment, work, communication and study.

The question that came out most negative was the knowledge about what Tics are, 65.6% of people do not know what they are, and 34.4% of people do know that they are, this means that although they have made use of them once in their life, never informed before. We must become aware that technology is advancing, and we should always be informed of the current situation, even if we do not like it. It is like the news, although certain people do not like it, it is necessary to know what is happening around society.

As mentioned by certain authors who:

“The use of mobile devices has become an instrument to accompany the daily activities of children and not as an instrument of mere necessity and the impact it has generated in today's society, which favors the growing concern over The influence that these new technologies can exert specifically on mobile devices (Tablet and Smartphone), in personal development and adjustment, which is increasingly interested in knowing not only the use that children make with their devices, but also the factors of risk and protection adjacent, both in the personal scope and in the different contexts in which they themselves grow”

(Martinez, Enciso, Gonzalez, 2014, pp. 77-78)

3.1 Technology, an indispensable invention?.

Currently technology or electronic devices are seen as an indispensable use in everyday life, this is because most of the time we are using technology, without realizing its constant use. All of necessity we have a cell phone, to be able to be in communication with the people around us, the works of today need people to use their cell phones to be more informed, to be able to give orders without being physically present, etc.

So, if it is an indispensable invention nowadays, it is very useful when you study, work, etc. Even the races that are predicted to be a success in the future have to do with technology, because as the centuries change, people have to adapt to the new changes and learn from them.

Technology is a learning, a knowledge, is made up of several tools that have been evolved. It has increased global communication, before sending letters it took weeks for the letter to reach its addressee, nowadays it takes seconds.

3.2 Does technology encourage vagrancy or encourage student study?.

Students use technology for the most part to communicate, to play and to study. Just as there are people who use media correctly and integrally, there are also people who misuse technology. That is to say that if part of the vagrancy is encouraged because there are certain people who only copy and paste the information, they do not even take the time to read the information, they only do it because they have a job and that ultimately makes them feel bad because they do not They learn from the deep research they should do. Before people were educated and took the time to read all the information.

Conclusions

At the end of this monographic work it is concluded that:

- Technology refers mainly to a capacity created in which the human beings facilitate their efforts in a way that they see necessary so that in the long term, their efforts will be shorten.
- Education has been involved in the technology around the last century, in positives and negatives ways
- TICs is a new trend that consists of the use or the implementation of technological tools for the purpose of teaching
- According to the research and survey must of the teenagers use the technology to their daily life, it could be a positive use for their learning
- Technology has been a revolutionary change in the last century due to its advances.
- Education can see technology as an effective method, but at the same time it has negative things that can lead to its use is not correct in school settings.

- Tics is a tool that was created in the nineties and its purpose is that the person who uses it can reach better concepts of an investigation
- One of the pros of the technology is more quickly the communication between people, and it's better in some cases, you can learn more, you can search and find fast information
- One cons is the fraud or copying because people instead of make their own summary, they copy and paste the information
- The technology has a lot of benefits, like the speed with which you can know a topic, cost reduction, you do not need physical material, advantages over students who want to know more about a theme
- Students can have extensive research individually, collectively and productively. They can draw their own conclusions from what they read
- The tics are also used for people to evaluate themselves, as well as they can learn they can also measure their performance
- Technology refers mainly to a capacity created in which the human beings facilitate their efforts in a way that they see necessary so that in the long term, their efforts will be shorten.

Recommendations

At the end of this work it is recommended that:

- Technology can be positive, but you should not abuse it, and you should not misuse it
- Education has adopted technology as a method of easy study, however it is not advisable to make use of it in its entirety, because students can use it as a means of distraction
- It is recommended that the technology for minors be under the supervision or authorization of an adult

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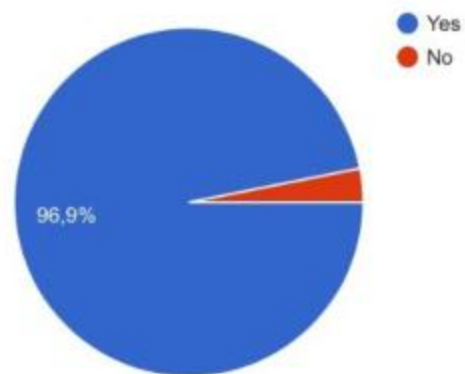
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Annexes

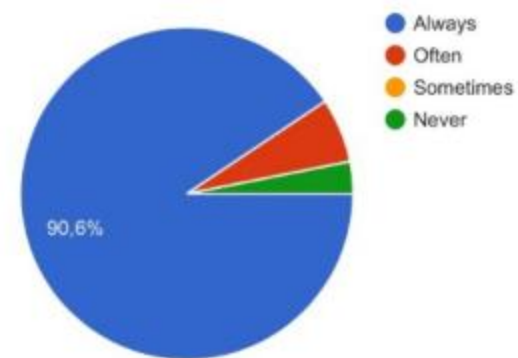
Are you familiar with technology?

32 respuestas



How often do you use technology?

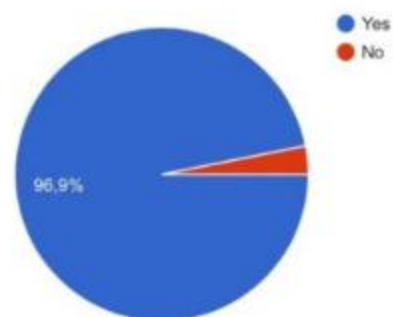
32 respuestas



Picture 1.

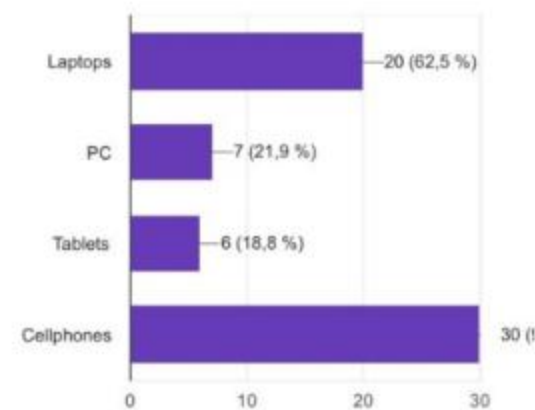
Do you think that technology is important nowadays?

32 respuestas



What kind of technology do you use?

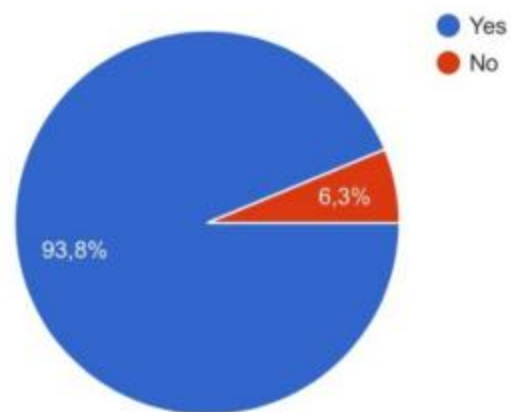
32 respuestas



Picture 2.

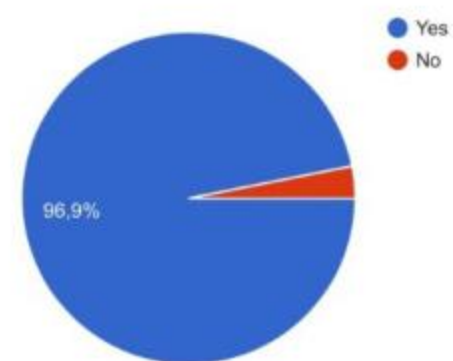
Do you consider that technology has to be applied in education?

32 respuestas



Do you have access to internet in your house?

32 respuestas

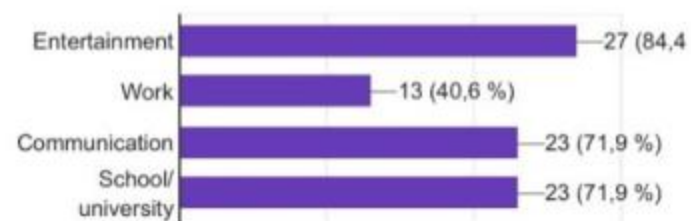


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re 3.

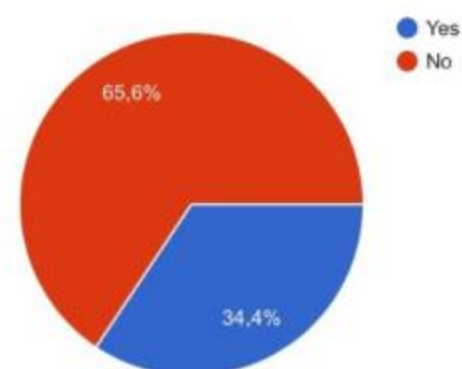
For what do you use technology ?

32 respuestas



Do you know what TICs are?

32 respuestas



Picture 4.