The Use of Internet and Social Networks as Methodological Tools in The

School Environment

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Abstract

This work addresses the integration of the Internet and Social Networks to the teaching-learning processes in the school environment, using the computer as an intermediate tool between student and teacher. The use of these technologies is transforming human relationships in all their dimensions: economic, social, and educational. The cognitive development of these students is being mediated by these technological resources, where these new information and communication technologies will expand their potential. The objective of this study was to understand the importance of using the internet and social networks in the teaching-learning process in the school environment as a methodological resource and to what extent it is favorable to the student's intellectual development.

Keywords: School environment. Integration. Transformation.

1. Introduction

This work addresses the integration of the Internet and Social Networks to the teaching-learning processes in the school environment, using the computer as an intermediate tool between student and teacher. The use of these new technologies is transforming human relationships in all their dimensions:

economic, social, and educational.

According to Porto (2006), the use of the internet and social networks at school highlights challenges and problems related to spaces and times that the use of new and conventional technologies causes in the practices that occur in the school's daily life.

In order to understand and overcome them, it is essential to recognize the potential of these available technological tools and the reality in which the school is inserted, identifying the characteristics of the pedagogical work carried out in it, of its faculty and students, of its internal community and external (BARBOSA, 2004). Understanding this, favors the incorporation of different discourses existing at school in pedagogical practice and other school activities in situations where they can bring significant contributions. Social networks are used according to the educational purposes and the most appropriate strategies to provide the student with learning. One learns to deal with diversity, scope, and speed of access to information, as well as with new possibilities for communication and interaction, which provides new ways of learning, teaching and producing knowledge, which is incomplete, provisional and complex. (PORTO, 2006)

According to Duarte et. al (2008) the cognitive development of these students is being mediated by these resources, where these new information and communication technologies will expand their potential.

The objective of this research was to understand the importance of using the internet and social networks in the teaching-learning process in the school environment as a methodological resource and to what extent it is favorable to the student's intellectual development.

2. The use of the internet and social networks in teaching

2.1 The use of social networks in the 21st century

The use of social networks and especially the internet has been expanding and becoming a landmark of the 21st century. With the globalization these new technologies started to be inserted in our daily life, mainly in schools and with that the information and knowledge arrive with more intensity and speed, making the cognitive development of children and young people expand more and more potential for assimilation of school content. (PORTO, 2006)

Information is made available through increasingly innovative social networks, making new ways of thinking, acting, living, and learning arise using these technologies. (DUARTE et. Al., 2008) To ensure that the implementation of technologies is efficient, Maturana (2001) mentions:

"Undoubtedly, the interconnectivity achieved through the internet is much greater than what we lived a hundred or fifty years ago through the telegraph, radio or telephone. However, we still do with the internet nothing less than what we want in the domain of the options it offers, and if our desires do not change, nothing really changes, because we continue to live through the same configuration of actions (to thrill) that we usually live." Pozo (2008) points out that "for the proper use of technology in education, the training of education professionals is necessary, so that they can instruct students in how to use these tools for educational learning."

Given the above, it is necessary to study and familiarize the entire school community with these technological tools, not as spectators, but as collaborators of the process and being aware that social networks, together with the internet and the computer came to assist as well as chalk and blackboard. (BRITO & PURIFICATION, 2006)

According to Moran (2005), everything we do to innovate in education today will be little, he shows that the more social networks and technologies, the greater the importance of trained, competent and creative professionals so that they have the chance to generate students with the same characteristics, after all we are living in the 21st century where the use of logic prevails and the lack of knowledge of young people who were born in this globalized and totally competitive world, where vast knowledge in different subjects is no longer admitted.

That is why it is of great value that the child be inserted into the virtual world at an early age, as in this phase he sees the computer as a diversion and with that (playful view) his curiosity is explored to enter the reality experienced in everyday life.

2.1.1 The computer age in the Brazilian educational system

The computer age in the Brazilian educational system began in the 1980s and 1990s, with an initiative from the Ministry of Education (MEC). The objectives of this information technology in education is to cause changes in students making them more and more able to interact with this technology and in this way, to be able to walk each day towards intellectual progress. For this to happen, some projects were created for the Inclusion of Educational Technology in the country. (LUCENA, 2003).

MEC sponsored a project called EDUCOM (EDUCATION WITH COMPUTERS), which was destined to the development of research and methodologies on the use of the computer as a pedagogical resource. Then it implanted in each State the Center for Informatics in Education (CIED), followed by the FORMAR project which, as the name says, trained and specialized teachers for the use of informatics in education, enabling the operation of these centers.

Currently, the National Program for Informatics in Education (PROINFO), from the Department of Distance Education of MEC, is introducing Information and Communication Technologies (ICT) in schools.

Brito & Purificação (2006) created a more complete graphic with all the political actions of educational informatics in Brazil, according to table 1.

Year	Actions	
	The Special Secretariat for Informatics (SEI) made a proposal for the educational,	
1979	agricultural, health and industrial sectors, with a view to enabling the computational	
	resources of its activities.	
1980	The Special Secretariat for Informatics (SEI) created a Special Education Commission	

Table 1 - Political actions of educational informatics in Brazil.

	to collect subsidies, aiming to generate norms and guidelines for the area of information			
	technology in education.			
	I National Seminar on Informatics in Education (SEI, MEC, CNPq) - Brasília.			
	Recommendations: Educational IT activities should be guided by cultural, socio-			
	political and pedagogical values of the Brazilian reality; the technical and economic			
1001	aspects must be considered not in terms of market pressures, but of socio-educational			
1981	benefits; one should not consider the use of computational resources as a new panacea			
	to face education problems; there should be the creation of experimental pilot projects			
	with limited implementation, aiming at conducting research on the use of information			
	technology in the educational process.			
	II National Seminar on Educational Informatics (Salvador), with the participation of			
	researchers in the fields of education, sociology, informatics, and psychology.			
	Recommendations: The study centers must be linked to universities, with an			
1982	interdisciplinary character, giving priority to high school education, while involving			
	other teaching groups; computers must function as an auxiliary means in the educational			
	process, and must submit to the purposes of education and not determine them; its use			
	should not be restricted to any teaching area; priority should be given to teacher training			
	in terms of theoretical aspects, participation in research and experimentation, in addition			
	to involvement with computer technology and, finally, the technology to be used must			
	be of national origin.			
	Creation of the Special Commission for Informatics in Education (CEIE), linked to SEI,			
	National Steel Company (CSN) and the Presidency of the Republic. This committee			
1983	included 49 members of MEC, SEI, National Research Council (CNPq), Financier of			
	Studies and Projects (FINEP) and Embratel, whose mission was to develop discussions			
	and implement actions to take computers to Brazilian public schools.			
	Creation of the Educom - Computer Education project. It was the first official and			
1983	concrete action to take computers to public schools. Five pilot centers were created,			
1705	responsible for the development of research and the dissemination of the use of			
	computers in the teaching-learning process.			
	Officialization of the study centers of the Educom project, which was composed of the			
	following institutions: UFPE (Federal University of Pernambuco), UFRJ (Federal			
1984	University of Rio de Janeiro), UFMG (Federal University of Minas Gerais, UFRGS			
	(Federal University of Rio Grande do Sul and Unicamp (State University of Campinas).			
	The financial resources for this project came from FINEP, Funtevê and CNPq.			
	Creation of the Informatics Advisory Committee for Education of 1st and 2nd Degrees			
	(Caie/Seps) subordinated to MEC, to define the directions of the national educational			
1986 and	information policy from the Educom Project.			
1987	Its main actions were: holding national educational software contests; writing a policy			
	document defined by them; implementation of Educational Informatics Centers (CIEs)			
	to serve approximately 100,000 users, in partnership with the State and Municipal			

	Education Departments; definition and organization of CIEs' teacher training courses			
	and evaluation and reorientation of the Educom Project.			
1987	Elaboration of the Immediate Action Program in Informatics in Education, which had,			
	as one of its main actions, the creation of two projects: Projeto Formar, which aimed at			
	training human resources, and the CIED Project, which aimed at implementing			
	Computer and Education Centers. In addition to these two actions, the needs of the			
	education systems related to information technology in primary and secondary			
	education were raised, the Educational Informatics Policy was prepared for the period			
	from 1987 to 1989 and, finally, the production of educational software was stimulated.			
	The CIED Project was developed in three lines: CIEs - Centers of Informatics in Higher			
	Education, CIED - Centers of Informatics in Education of 1st and 2nd Degrees and			
	Special; CIET - Informatics Centers in Technical Education.			
1997 to the present	Creation of Proinfo, a project that aimed at the formation of NTEs (Educational			
	Technology Centers) in all states of the country. These NTEs will be composed of			
	teachers who must even undergo postgraduate training in educational computing, so that			
	they can exercise the role of multipliers of this policy. All states will receive computers			
	according to the population of students enrolled in schools with more than 150 students.			

Source: Brito & Purificação (2006)

These political actions in Brazil were carried out by different people who participated in the programs, among them, teachers, technicians, and administrators from the knowledge of different institutions in the country. (BRITO & PURIFICATION, 2006) For this reason, Chaves points out:

"... the public authorities have a significant share of responsibility in the task of creating conditions that will contribute to the nation's cultural and technological autonomy, thus eventually reducing the distance that separates the country from the more developed nations. (CHAVES, 1987)."

2.1.2 The importance of the internet and social networks in teaching-learning

The Desktop Computer, better known as Desktop, was once considered a sophisticated equipment and a "consumer dream" for many people. Nowadays, not only him, but Notebooks, Tablets and Cell Phones are part of our reality and everyday life together with the internet and social networks being present in several aspects as well as in work, leisure, and education. (SAVIANI, 2001).

Believing that education is a right for everyone, this theme arose to reflect the importance of new technologies in schools. However, when talking about new technologies, it is necessary to explain that it is not a fad, nor a new educational trend, but an essential process in the students' lives. (MORAN, 2005) With the exploitation of social networks in education, the field of study and research of students has

With the exploitation of social networks in education, the field of study and research of students has improved. And through them (social networks), both teachers and students can exchange experiences and content with information on different areas of knowledge, that is, "the main element becomes the rational organization of the means" (SAVIANI, 2001).

Amid the complexity of learning and teaching, it is necessary to search for new teaching methodologies, and social networks bring possibilities that generate different means of teaching.

Many scholars have drawn attention to social networks and the importance of the internet in education, just as Moran (2005) points out that the internet is a great support network for education, an indispensable anchor for the vessel.

Lucena points out,

"The insertion of ICTs in education, with an emphasis on the computer connected to the Internet, becomes essential, since students already explore in their daily lives the innumerable possibilities made available by new technologies and all that they represent in terms of potentials for production and dissemination of knowledge, as well as other facilities related to life/work." (LUCENA, 2003)."

Social networks are multimedia systems because they are interactive, and thus, facilitating the exchange of knowledge between all school communities. With these new networks, the user, in this case the student, is no longer a passive receiver, deciding what information they want to receive; since the teaching-learning process becomes not only by the teacher, but also by other means. (CORTELAZZO & GARCIA, 1998)

According to Bicudo (1999), communication and interactivity processes are always considered as advantageous in educational processes assisted by the computer, that is, that use this medium for this. The ease of access to social networks through the Internet, changed the profile of the student who started to demand another form of knowledge transmission and not in an archaic way. The teacher as a mediator uses these new technologies together with the didactic material (books or handouts) in favor of education, speaking the same language as the student, who in turn develops skills such as attitudes and values assimilating the contents and improving socialization with the world , where it always lives in evolution and constant change. To better illustrate Cortelazzo & Garcia (1998), they set up Table 2 containing the comparison between a situation in traditional education and another in teaching with new technologies.

	Traditional Education	Technological education			
Teacher	An expert	A facilitator			
Student	One received passive	An active contributor			
Educational emphasis	Memorization of facts	Critical thinking			
Evaluation	What was repeated	Interpretation			
Teaching method	Repetition	Interaction			
Access to knowledge	Limited to content	boundless			

Table 2 - Comparison between traditional and technological education.

Source: Cortelazzo & Garcia (1998)

According to Gadotti:

"Access as digital communication and information networks is important for the functioning and development of any social institution, especially for education that is directly directed at human formation ..." (GADOTTI, 2000).

The use of the internet, along with social networks, as a research tool is fantastic. Museums can be visited, as well as there are a multitude of libraries, books, articles, magazines, documents, all available to be used in the best possible way. In addition, the education process can extract cultural and social elements, identifying problems to be solved via the internet through these sources of ideas. (GADOTTI, 2000)

In addition to these alternatives, there is also the possibility of learning to use Internet tools and social networks as a means of exporting your knowledge, no page building process for example. When designing as pages, articulation occurs in different forms of language, using a logical and spatial organization or that may not occur if you use the technology resource.

For Perrenoud (1999), how competences are built without seeds, without conflict with real obstacles, in a design process or problem solutions.

Complementing Perrenoud's thought, Almeida explains:

"(...) the project shows an activity that robs with disciplinary barriers, becomes permeable as its borders and moves towards an interdisciplinary proposal to understand and transform reality for the benefit of personal, group and global quality of life." (ALMEIDA, 1999).

2.1.3 The social networks most used by the school community

The constant use of social networks and new technologies can also be called cyberculture. It is through it that a current worldview is linked with digital communication. (KENSKI, 2007)

Currently the social networks most used by young people on the internet are Facebook, Instagram, and Twitter. Youtube is a digital medium. However, it can be considered a Social Network because there are chatters called: "live chat" and "comments". Live chats, as the name implies, users (students) can comment during the broadcast and Comments for post-post use. (BRITO et. Al., 2013)

WhatsApp can also be considered a Social Network, as there are relationship groups. According to Kenski (2007) "the technologies are as old as the human species". And it has been invading our lives over the years, expanding all our senses, and thus bringing a certain "technological comfort".

To Brito & Purificação (2006), one can exemplify how these new resources allow to encourage and help students in learning: Electronic Lists teach students to surf the Internet through electronic mails also known as e-mails, and with this each will be able to create their personal list of virtual connections; chats better known as online chat, allow the exchange of information, research and communication between those seeking to learn. The most used are: WhatsApp, Facebook Messenger, Skype, Google Hangouts and

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Telegram, Facebook can be used to publicize events at school, through the application "My Calendar" or "Events"; on YouTube, it can be used to assemble a virtual collection of school work or a specific class, through videos that can be used for a critical analysis of the materials presented. These materials end up becoming a reference for the school community, as the same stored on this social media can be shared worldwide. References are found in the National Curriculum Parameters - PCNs cited by Brito & Purificação (2006) where the ICTs are:

"Technological resources that allow the transit of information, which can be the different means of communication (print journalism, radio and television), books, computers, among others." (BRITO & PURIFICATION, 2006).

In teaching through the computer, information is the main part in its processes of storage, representation, acquisition and how this transmission of knowledge is done. Computer is undoubtedly the most used technology in the educational field, and the one that has generated more studies regarding its use; as well as handling the equipment where it requires thinking about the implications for the teaching-learning process of the subjects involved.

3. Conclusion

It is concluded that the new networks together with the internet are tools of aid in the teachinglearning process and that they are being used properly, generating a meaningful learning obtaining an increase of the students' creativity and motivation, that is, making become interactive and more dynamic. Social networks, internet and new technologies, provide us with an education with more quality and dynamism in the teaching process when used in an organized and responsible way, which can benefit a lot, as well as train more critical, sociable and autonomous apprentices capable of intervening in your own reality. In this sense, it is understood that the use of these new methodological learning resources favors the reconstructive questioning of both students and teachers. As a future work, we intend to carry out a research involving the school community, to know what advances in teaching and learning have been achieved in the use of technological tools for school content.

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