

The Use of Educational Technologies in Distance Education—Enabling the Appropriation of Teaching and Learning Process

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Abstract

This article aims at analyzing the specificity of the pedagogical work for Distance Education in learning process, highlighting the importance of technological resources. The research demonstrates the usage of technologies for the development of contents, emphasizing the importance of teachers as mediator of this process.

Keywords

Development; Distance Education; Learning; Technological Resources

1. Introduction

Education consists of culture appropriation, and it is understood in a wider way, involving knowledge, information, values, science, art, technology, philosophy, rights, customs, that is, all the things that man produces in order to transcend his/her nature [1].

According to it, education is a peculiar phenomenon owned by human beings. This phenomenon constitutes a historical process of cultural development that creates a more humanized world, improving humanity in people as it asserts the culture appropriation as an education process. In doing so, this process aims to bring conscious-

ness to people in order to help them “recognize themselves as citizens and prepare them to act democratically in society” [1].

A human world—or the cultural world—is settled according to the relations mediated by the work, in which it is possible to distinguish men from other animals, once they can anticipate their intentions before their actions. This process imprints in men the cultural and historical marks of their own actions and, while actuating on their external nature they will be able to change and be changed at the same time.

[...] the human nature is not given to men, but they are based on the biophysical nature to produce it. Consequently, the educational work is the act that produces in each individual—direct and intentionally—the humanity, which is produced collectively and historically by the men in conjunct [2].

2. Conception of Man, Society and World: Their Contributions in Education

In this way, it is understood that men make part of nature—but distinguish themselves from it—mediated by the relation among others. According to it, humans develop their intellectual, sensorial, emotional and corporal capabilities from a process that creates, concomitantly, the men humanization and the instruments that become socially collective such as the arrow, the bow, the hatchet, etc, in addition to the knowledge derived, from this interaction.

In doing so, men become humanized when producing their own existence, being mediated by the work that transforms the nature and by the man himself when he/she is the subject of his/her actions.

[...] man does not constitute himself naturally; he is not born knowing how to be a man, it is worth to say, he is not born knowing how to feel, think, judge or act. In order to think and feel, to wish, act and judge, it is needed to learn; which implies knowing the educational work. Then, the knowledge that directly concerns education is the one that emerges as the result of the learning process, as the result of educational work [2].

In this perspective, learning consists of the relation mediated by the interaction of signs, cultural symbols and instruments, basing on the fundamental assumptions that human beings constitute themselves when joining one another and that educational process is directly related to their growth, since their birth. This way, we understand that man humanizes himself inside the society and this humanization process occurs by inserting the man in his historical and cultural environment by means of appropriations built historically by the humankind.

The man is comprehended as a real individual, as a social being that interacts dynamically with reality and other men. They enable the diligence of the social relation conjuncts, in which he/she is inserted, with a tangible possibility to create and recreate spaces to confront social inequality that detracts—from the main part of the population—the rights to the appropriations and access of tangible and cultural assets built in society.

The teacher acquires knowledge from his/her pedagogical practice and, by using technologies as a fundamental pedagogical resource, he/she will have many possibilities to work. There is no technological resource that, even being the most attractive and complete, will replace a teacher role, who is the mediator between the student and the knowledge that he/she will acquire. The teacher has a pedagogical function of comprehending and intervening in the students’ learning process, showing them the paths to follow, by using adequate methodological and technological resources in order to make the knowledge effective.

In relation to the importance of the teacher mediation when using technologies as a pedagogical resource, it is necessary to emphasize that educational technologies are not magic assets, and they do not have the power to transform education since this is the responsibility of the teacher by using his/her knowledge and pedagogic planning. However, the teacher needs to make use of technologies and recognize their usage as an educational resource. Regarding it, Gouvêa argues that

the teacher will be more important than ever, because he needs to make use of this technology and insert it in the classroom, on his daily life, in the same way as a teacher, some time ago, inserted the first book in a school and that had to start dealing with knowledge in a different way without forgetting other technologies. We will continue to teach and learn by using the words, gestures, emotions, affectivity, television, read or written texts, but now we will also teach and learn by using the computer, the information in real time, the screen in layers, in windows that are multiplied in our eyesight [3].

Therefore, it is stressed the importance of the teacher training in order to use technologies in the classroom, seizing the techniques owned by the teacher, making the possible changes in the way of thinking and acting of the teacher since it is not possible the work with the teaching about technologies, but the teaching by using technologies.

The role of the teacher is to mediate students and to use technological resources in favor of their learning. An example is the internet usage, and it is usually seen as a research tool used to access information and data. However, when teacher mediates its access, the internet can have another meaning and can be used as a means of communication, enabling students to participate in projects, forums and debates, where they can discuss, interact and exchange experiences.

It is up to the teacher to mediate students for comprehension and interpretation of the data researched, making significative relations and helping them to contextualize it. In doing so, the internet becomes a resource for political, educational and social expression. The teacher permits such appropriation, changing information in real and historical knowledge, augmenting the students' horizons, their development and possibilities to learn. In relation to the internet usage, which is a means of communication, it can also help us to review, to increase and modify many present ways of teaching and learning.

It is important to take into consideration that there are innumerable possibilities to use technologies as an indispensable pedagogical resource for the teacher mediation during the process of learning appropriation by the student. Besides the internet, the technology facilitates access to costless games and programs available for download, for educative software usage, for text and image editors. However, the teacher is responsible to select the materials and activities to use accordingly to the students' particular and pedagogical needs.

In this way, a point to emphasize is that the teacher needs to be based on a conception. If the teacher does not establish objectives to reach an effective process for their learning and development, none activity will have relevance for the students' growth as a human being.

In order to consider technology as a new possibility to work, helping in the process of teaching and learning, the teacher cannot see it as a threat, but as a tool that will contribute for the development of the class.

Working as a professional of education, the teacher cannot deny the existence and, mainly, the applicability of technology when working with students. Learners have an affinity and they are very close to the technological assets, expecting that the classes surmount the traditional methodologies for something more innovated.

For this reason, the teacher, acting as a historical individual and agent in the process of social transformation, needs to keep searching for new processes for teaching and learn with the technologies present in the society and in the school daily life. He/she needs to be updated, in continuous training for the future and work actively in the present. The learning process can become effective when proposing significative interventions, helping the teacher to redefine his/her pedagogical practice. The educator needs to perceive that innumerable technological resources are daily used in the development of ordinary activities in the classroom, in the same way as the pencils, notebooks, blackboard and other materials or processes that are planned and produced so as to other people can read, write, learn and teach.

3. Technology and Distance Education: An Important Role in Learning Process

Technology is not limited to the use of machines, and the aim is to apply the scientific knowledge in order to obtain a practical result. The humankind has created science and technologies, from the wheel to the computer, and the changes were significative in their relations between the human beings and the nature, overcoming the traditional learning and teaching process.

We cannot simply use a resource. It is important that all the pedagogical action is previously prepared, using structured objectives and allowing students to keep in touch with new and different contents. By doing it, learners are stimulated to build new relations with themes previously acquired. The teaching work makes use of a pool of technological assets, aiming the learning appropriation according to the mediation of the educator, with diversified resources and from different methodological procedures.

Technology becomes the mediation for Distance Education, and according to it, the authors Pallof & Pratt [4] defines this process,

The technology serves as a vehicle through which the course is conducted. The students' social interaction in the context of the online course forms the foundation of the learning community. The purpose is the shared involvement in the online course itself. Sharing information, interests, and resources are part of what

online education is about.

Distance Education follows the evolution of the communication technologies, which gives support to this kind of education. In this context, the teacher may understand that technology contributions as a pedagogical resource will occur continuously. Then, he/she needs to act according to this possibility, planning his/her practices and organizing the pedagogical actions as a mediation for this learning process, trying to overcome expectations and, consequently, the appropriation of knowledge.

The development of new technologies, which has instigated a revolution in our society and in people's jobs, has permitted other possibilities for teaching and learning process. It has also provided the development of new alternatives for the Distance Education modality, combining the familiar educational resources with the tools of the Information and Communications Technologies (ICTs).

These directions point to the renovation of teaching by formulating a wider conception of the educational process in order to meet the demand of the society. In doing so, the ICTs can be used by the higher education institutes aiming to adequate and make their contents available, then giving rise to a greater flexibility of access to the distance courses.

An example of Government regulations for the arrangement of Distance Courses is provided in Brazil [5], such as the Law n. 9.394 of 12/20/1996 (Law of Directives and Bases of National Education), provided for in the Article 80 that the institution interested to offer on-line higher education courses must request specific accreditation to the Government as described:

Article 80. The Government shall foster the development and the broadcast of distance learning programs, in all levels and modalities of teaching, and of ongoing education.

§ 1° Distance education, organized with special availability and regime, shall be offered by institutions specifically accredited by the Government.

§ 2° The government will regulate the requirements for evaluation application and the register of certificates related to the distance education course.

§ 3° The rules for the production, control and evaluation of the distance education programs and authorization for their implementation are of responsible of the institutions, being able to cooperate and integrate with different ones.

4. Conclusions

All in all, men are recognized as real subjects, as social beings that interact dynamically with reality and other people, enabling equality in the conjunct of social relations in which they are inserted as a real possibility to create and recreate spaces to deal with the existent social differences in society. Then, it is possible to offer to population the appropriation and the rights to access the material and cultural goods built by society, although this distribution sometimes occurs according to the social position of each person.

In this way, it is understood that humankind humanizes himself when living in society. This process occurs when he/she is included in the historical and cultural environment through the appropriations established historically by society. Additionally, technology stimulates creativity, transforming the possibilities to work and to access information in real time. Then, information becomes the most valuable good of a society and country.

Men are not born as human beings, that is, they become human beings when inserted in social, historical and cultural life. Education is responsible for the cultural socialization that occurs during the interaction among people in educational process. It valorizes the teacher as the one who organizes and mediates the relations among students, knowledge and social reality, giving these professionals the chance to appropriate their own reality.

Finally, it belongs to the educational technology the role to help in teaching and learning process in order to propitiate ways for using the technological resources in education. Consequently, the educational technologies become an efficient tool during classes, and it is considered as a fundamental element in education. For this reason, its usage and importance for teaching are related to aspects such as formation, involvement and responsibility of all the people involved in educational process.

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References

- [1] Paro, V. (2010) Exercise of the power: Criticizing the common sense in education. Cortez, São Paulo.
- [2] Saviani, D. (1991) From common sense education to philosophic consciousness. 10th Edition, Cortez, São Paulo.
- [3] Gouvêa, S.F. (1999) Teacher's paths in the technology era. In: *Education and Informatics magazine*, SEE/FDE, São Paulo, 11-17.
- [4] Paloff, R.M. and Pratt, R. (2001) The virtual student—A profile and guide to working with online learners. Jossey-Bass, San Francisco.
- [5] Brazil (1996) Ministry of education. Law of directives and bases of national education. Law n. 9394/96.