

EDUCATION, FAMILY AND THE TECHNOLOGICAL REVOLUTION

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Abstract -- Time of post-modernity, time of artificial intelligence based on psychology and psychoanalysis, individualism plays an important role and on which will depend the existence of peoples rather than solidarities, in this era the role of the family in education has an important impact, single people, disintegrated families, working mothers, in which communication will be a fundamental factor in the transmission of values and education, in this third wave as Alvin Toffler calls it [1].

Reality is based on individual values, technology plays an important role since it generates new economic, labor and family relationships, this technological revolution generates artificial intelligence that is capable of controlling multiple variables in a short time and in which social values are empty of action.

Keywords: Artificial Intelligence, education and family.

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INTRODUCTION

In order to approach an analysis of the role of the family and new technologies in education, it becomes necessary to interpret it from a generalist point of view, which can take into account all social phenomena and behavioral changes that are generated by this third wave in which reality is composed of the space industry, artificial intelligence, robotics, genetic engineering and biotechnology on the one hand, and on the other hand, disintegrated families, single people and working mothers, artificial intelligence, robotics, genetic engineering and biotechnology on the one hand, and on the other hand, disintegrated families, single people and working mothers, and for this reason General Systems Theory is chosen as the science on which we will base ourselves to explain the role of the family and new technologies education.

The large volumes of information that can be found today in the digital space that does not represent knowledge but information itself, places the student in a sea of information that with the help and guidance of teachers can determine the value of the information they find. This as long as there is an involvement of teachers in the new era of knowledge and the use of new information and communication technologies.

The main actors involved in the Educational Process are the teachers, the students, and the

The family plays a very important role in the values that are instilled at home that will help the student in their actions during their professional training, and they are also the providers of the materials and tools that their children need for their professional training.

The communication that should exist between the school and the family also plays an important role in the success of the students' studies, removing belief that they are already responsible adults at a higher level, and leaving them alone in this process.

With family support it would be a more meaningful process, because it puts the student in a central point in which the importance for the family of their professional training makes them feel committed.

DEVELOPMENT

The way in which we grasp the social reality, places us to understand and transform the world [2], this human activity involving thought, will and feeling will help to such transformation, and we must consider it from the point of view of idealism since human activity will be studied with all its senses.

Considering that each actor knows perfectly well their fundamental role in the Educational Process and better yet, they fulfill it to the fullest.

The educational model for the 21st century [3] conceptualizes and resizes the Educational Process, with the purpose of cultivating scientific and technological education for the development of a human being capable of facing the challenges of sustainable development with instrumental, rational and ethical intelligence.

This educational model is a systemic tool to face the challenges in the National System of Technological Institutes that today depend on the Tecnológico Nacional de México.

It becomes necessary in order to analyze the role of the family and new technologies to consider symbolic anthropology and educational action [4], in which social phenomena must be conceived both symbolically and meaningfully, and to

It is necessary to focus on the meaning of actions, institutions, myths, rites, customs and events for social actors; it is necessary to unveil people's relationships with new technologies, to consider phenomenology, hermeneutics, symbolic interactionism, ethnography and ethnomethodology, to understand the intersubjectivity of social phenomena, to approach face-to-face relationships between the family and the students and the communicative action that is exercised and the involvement of the actors.

The school's demand represented by the teachers and the students' commitment supported by the family is the perfect combination to allow the insertion of the new information and communication technologies.

Sacred values have been colonized by the values of technology: efficacy, efficiency and utility [5], and these are symbolic even if they pretend to operate as symbolic, which is how the role of new technologies can be analyzed.

The family-school relationship is very important for the student's follow-up, so that they perceive that there is continuity in their education, which is why fluid and constant communication required, with various resources or activities so that they can be carried out. [6]

Family-school communication plays an important role in the educational process, as well as in implementation of new information and communication technologies.

At present we must consider that there is a systemic phenomenology, both internal and in relation to the environment with which it is in contact, and this can be studied through the General Theory of Systems [7], and through this theory we will try to overcome the reductionism of the experimental method for the cause-effect explanation, since we will consider the flows of information handled in the relations of the family with education to prepare students to changes and the adaptation of new technologies.

New technologies generate new relationships in families, changes that will be observed and analyzed based on this theory, since General Systems Theory [8] seeks to explain social phenomena based on the idea that everything that moves is part of a social system.

Understanding by system [9] the arrangement of interrelated and interacting elements to form a whole; this theory will allow us to see the object of study in a generalist way.

As mentioned above the prevailing value is utilitarianism [10], and man in the eagerness to use information technologies, has relativized the absolute, the immovable truths, has replaced the logic of morality, the belief in great values and the logic of reason by need or the satisfaction of desire, without being able to distinguish between what serves us from these new technologies and what does not serve us.

This is where the role of both the family and the teachers play an important role, since they will guide the students in the usefulness of the information they find in the networks, the family guiding in terms of values and providing the technologies they require, and the teacher as the authority of knowledge who knows what is valuable and what is not.

Digital technologies and the Internet are developing day by day, and has caused to live in a digital context characterized by connections, has changed the way of learning and therefore the way of teaching.

The information is on the network, and the teacher must accompany his students: Technological tools and the virtual space change the way of communicating and living together in society.

Young people are self-taught in relation to the use of the Internet, technologies are developing in an unstoppable way and this massive use of the Internet has transformed the context of the educational process, information and communication technologies have led to new literacies that enhance skills and competencies of the XXI century. [11]

Digital competencies are required to be able to manage in the best way this insertion of new technologies to education, and students do not get lost in all the information that is handled in the digital space, so it is important that the teacher's guide can guide in the value given to the information found.

In terms of J. Colom, Antonio and Melich Joan Carles [12], the philosophy of postmodernity, a new superficiality has emerged that prolonged both in contemporary theory and in a whole new culture of the image or the simulacrum, the appearance devours the being, morality as a transcendent element to the social has disappeared, the other becomes an enemy, is no longer indispensable, it is a carnivalesque society that uses the game of masks.

Training institutions are interested in improving the efficiency and relevance of their activities, which is reflected in the communication [13] and information processes that are found in a wide range of empirical situations and are undoubtedly essential for the development of organizations in both the biological and social worlds. Information is a decrease in uncertainty.

But unanalyzed, undirected information can generate problems within education, because if it is not handled properly, it can be detrimental to the training of students.

Boulding [14] calls the general theory of systems the "Skeleton of science" in the sense that this theory seeks a frame of reference to a structure of systems, since, seeing the Educational Process as a whole, it studies the way in which the social actors involved in this process interact with each other, and defines the new role that it has to play in the face of the changes that are being generated.

This is where the importance of the role to be played by the social actors involved in the educational process lies, in view of the changes it undergoes.

by involving new information and communication technologies in education.

Considering that first world that Popper calls [15] natural and tangible reality, in which new technologies are an instrument to improve the life of man and in which education has important contexts such as technology and the family in which the objective of education is the adaptation to the new and changing.

We must achieve an understanding of the uncertain, and although General Systems Theory [16] does not prove, does not experiment and does not substantiate, it coordinates reality and will provide us with a global and complex approach to the role of the family and new technologies in education.

It is possible to corroborate the importance of the involvement of the different social actors in the Educational Process, in view of the pandemic that started in March 2020 in Mexico by the COVID-19, which suddenly became a worldwide emergency, in which the first actions taken were to send the students home, and the indications of the educational authorities were to use the new information and communication technologies to continue the classes.

Digital technologies have influenced the way we learn and, consequently, the way teachers teach. Connectivism is the learning theory of the Digital Era, which analyzes the way in which learning takes place in a digital society that is articulated in a network. [17]

But that is in theory, when we teachers who are committed to the educational process, but who never gave due importance to the use of new technologies, and when faced with unexpected scenarios, they do not have the tools and even worse, not even the will to face this emergency and conclude with the academic activities, and then the conditions of the students who say they do not have the necessary tools to carry out this virtual education.

It should be clear to us that for education to be of quality [18], the social actors be committed to education and be truly involved, stop seeing education from this utilitarian approach, and see it from a humanistic point of view, in which within the school there are actors who are responsible for the Educational Process adopting the new information and communication technologies in such a way that the roles that the main actors must play are not lost.

When talking about quality [19] in education, the needs of the students must be satisfied, therefore, teachers must be the guide that is required, opening more communication channels.

And for this, the digital skills that a teacher have will be of great importance, as it will be the main tool to communicate with students.

Information on the network is abundant, but there is a need to build a network of learning sources that can be entered and exited at any time, knowledge is abundant so the ability to manage knowledge as a true criterion of value is considered more important. [20]

In this sense is where use of new technologies becomes vitally important and the teacher can apply them to be able to continue with the educational process despite the adversities. Since it is a question of being able to finish the study programs at a distance, the revision of the projects and to be able to assign a grade.

The principles of a well-ordered society [21] are the policies that regulate it and the ethics of its social actors, in which each one accepts and knows that the others accept the same principles; and as a family they are an example to be followed by the students, since they model authority, and it is a way to develop morality.

But the family must also realize that new technologies are already part of education,

that it is necessary to have the minimum resources to be able to comply with the activities that are required and demanded in the school.

According to the European project DIGCOMP: A Framework for Developing and Understanding Digital Competence in Europe, the key components of digital competence, i.e. the knowledge, skills and attitudes needed to be digitally competent are [22]:

Information: identify, locate, retrieve, store, organize and analyze digital information, evaluating its purpose and relevance.

Communication: communicating in digital environments, sharing resources through online tools, connecting and collaborating with others through digital tools, interacting and participating in communities and networks; intercultural awareness.

Content creation: creating and editing new content (texts, images, videos, etc.), integrating and reworking previous knowledge and content, creating artistic productions, multimedia content and computer programming, knowing how to apply intellectual property rights and licenses.

Security: personal protection, data protection, digital identity protection, security use, safe and sustainable use.

Problem solving: identify needs and digital resources, make decisions when choosing the appropriate digital tool, according to the purpose or need, solve conceptual problems through digital media, solve technical problems, creative use of technology, update own and others' competence.

If there is awareness on the part of the family of need to have the new information and communication technologies, and if students and teachers have these skills, they will have better results both in a school environment and in distance education, since they will be able to have better communication and therefore they will be able to achieve educational objectives in a better way.

DISCUSSION AND ANALYSIS OF RESULTS

The pandemic that the whole world is going through, the state of emergency in Mexico as of March 2020, in which one of the first strategies was in the educational system, which consisted of sending teachers and students to stay at home and carry out all activities through the use of technology.

The authorities had full confidence in the digital knowledge and skills of their teachers, taking for granted that communication with their students would be through digital media, the reality is far from what was proposed at the time when it was decided that the school would go to the virtual space.

The necessary actions were not taken to have the information of all the students and that the students had information from the teacher to be able to generate this virtual communication.

In many cases, the digital competence of communication is not fulfilled because the information is not available. The management of information becomes complex because of not knowing how to evaluate its relevance.

The creation of content to share with students became complex considering that the main means of communication with students is the cell phone, and they do not have a computer to make school applications, programs, simulations, as well as different projects, in this aspect the family plays an important role in providing resources to students, computer and a good internet become indispensable tools.

And the problem-solving competence to identify needs and digital resources, when choosing the appropriate digital tool to communicate with students is not fully met by not knowing what resources the students have.

In addition to the competencies that teachers must have to be able to comply with distance education, in Mexico there are 80.6 million Internet users and 86.5 million telephone users.

In rural areas, 47.7 percent of the population are Internet users, but only 44.3 percent of households, which is the case here, have a computer [23].

The National Institute of Statistics and Geography (INEGI), in collaboration with the Ministry of Communications and Transport (SCT) and the Federal Telecommunications Institute (IFT), publishes the National Survey on Availability and Use of Information Technologies in Households (ENDUTIH) 2019. It is estimated at 20.1 million the number of households that have internet (56.4%), the main means for users' connection in 2019 were Smart cell phone, laptop and desktop computer. Users also identified that when connecting the network was slow for information transfer, interruptions in service and excess of unwanted information [24].

As can be seen, many households do not have a computer 55.7% and 45.6% of households do not have an Internet connection, making it even more difficult to communicate in this modality. In addition to the problems that arise in its use.

CONCLUSIONS

Postmodernity demands that the human factor be developed [25]. Technology develops and deepens the expressive and intellectual possibilities, technology is at man's disposal, art, design and creation depend on computer and visual technology, social peace will be achieved through knowledge and individual development, education will facilitate knowledge to innovate and live and adapt to changes, the family must be directly involved in the training processes, the home as a center of continuing education and parent training schools for the educational care of children, a training to adapt to new production technologies and to prepare for changes.

The ability of the different social actors to be able to respond to

adversities such as the one presented today by the COVID-19 issue, in which classrooms are empty and the virtual space is saturated, but it is not known what educational results may be obtained.

Throughout this period there have been several communiqués from the authorities in which the social actors feel confused about the course to follow, in which on the one hand there was a glimpse of the possibility of returning to the classroom and being able to finish classes by going through the calendar, but in the end it is concluded that there are no conditions to return to the classroom and that the semester will end with distance classes, and for those who did not have communication with the teachers, it will be extended until the end of June.

The lesson learned from this pandemic is the need to be prepared for any contingency that may arise, learning on our own or through intersemester courses on the use of new information and communication technologies education and, above all, maintaining constant communication among the different social actors.

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