FUSION OF NEW TECHNOLOGIES IN INITIAL EDUCATION

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Abstract: These days, the connection among computers and youngsters comprises a discussion that creates still couple of occurrences since it is another theme on which there is stills far to go. The present exposition tries to add to the topical investigation of the equivalent, uncovering a progression of thoughts and hypothetical pragmatic reflections to accomplish a satisfactory reconciliation of new advancements at the underlying level, which comprises a procedure without return. In this manner, it is important that educators handle key criteria to settle on the academic choices of the case in the activity of their developmental job with the learners who took birth after the worldwide acceptance of electronic technology, forming necessary skills to act efficiently in the new knowledge society and the information. Moreover, it is necessary that teachers consider the need to train in the field of computer science to understand this new language of relationship with the world today.

IndexTerms **- Information Communication Technology, New Technologies, Child Education.**

I. INTRODUCTION:

For more than thirty years we have lived in the information society based on a series of transformations that have changed the material base of our society. One of the most striking phenomena has been the widespread introduction of new information and communication technologies (ICT) in all areas of our lives. ICT is seen as a noteworthy apparatus for constructing "knowledge societies" (UNESCO 2003). ICT has strongly influenced the way we work, have fun, communicate, socialize and learn, as well as in our way of thinking. For this reason, the teaching task involves identifying the capabilities that digital natives need to be effective in this new culture or way of being; recreating methodologies and materials based on digital environments, making the most of their effectiveness while preserving our humanity. Initial education has a set of innovative pedagogical practices that have been consolidated over time. In this sense, the integration of new technologies to educational processes with young children is a challenge and an opportunity to model and optimize our teaching practice, responding to the most rapid and important adaptation that the cerebrum has experienced in thousands of years.

Yang (2009) gives a case of the advantages of utilizing ICT and analyzed elementary school pupils' effective viewpoints and psychological observations with the end goal to comprehend the difficulties and openings that learners confronted. The selection and utilization of ICTs in training positively affect educating, learning, and research. Moreover, educating with technology can develop deepen learners learning by encouraging instructional targets. The abilities for a grown-up life incorporate technology education and individuals who don't obtain and ace these capabilities may experience the ill effects of advanced type of the digital gap, which will affect their ability to viably work and flourish in the new learning economy (Groff, 2013).

II. YOUNGSTERS AND NEW TECHNOLOGY:

Kids and PCs are issues that create numerous inquiries and questions, given that there are numerous biases amidst a change in perspective in connection to the limits that must be produced in offspring of the underlying level. There is no doubt that we are in the age of information and knowledge. New technologies are another component of the environment where children move, grow and develop. We find PCs all over: hospitals, bookshops, stores, banks, sitting areas, schools, homes, libraries, among others. On the off chance that we begin from the premise that each kid needs to watch, find, investigate and test in their condition to fitting it, at that point they have the right to relate to the technological means that are within their reach. They are so comfortable in light of the fact that they coincide with them through their folks, kin, instructive foundations, and also the numerous offers that society offers each day. Technology is considerably nearer than we might suspect and isn't restricted to computer games or software science. Usually to hear numerous guardians discuss how your child of only two years deals with the remote control of the TV, the mobile phone, among different wonders.

These experiences of kids do not stop in the form of games that not only enhance and develop their intellectual skills, but also allow them to win the praise and celebration of their parents and adult world. Without any doubt, they have the first approach of the world of technology. Playing a child touches a button, laughs and looks at your parents who return their eyes with enthusiasm. This sequence which repeats repeatedly is a playful scene and satisfaction experience. Technology contributes to the empowerment of children. They should practice their continued ability for handling technology to be happy in curiosity,

interest, challenge and learning. This is so much demand for these new generation children. The subject is in time and the manner in which it is with this process. A child explores all the possibilities of the medium widely in its small world, unless it is a matter of some questions where it is necessary to include adult and language. Therefore we must nurture and expand these learning spaces while the children are together with an adult who mediates between the technology and them, encouraging other questions, putting together other playful scenes from their game, putting words and sounds that establish the language, approving or challenging, sharing the laughter and joy of that moment, thus generating meaningful learning for them But if we keep a child in front of an educational software only for academic purpose, in front of video games for entertainment; there generates an alliance disorder, which is nothing but separate children from parents, their students from teachers. Therefore, the time and options that we offer our kids must be properly organized. Adults must overcome the natural barrier that appears when thinking about gaming experiences with the use of computers, due to a kind of certain invisibility, since this is developed on the screen. For adults born in the book and television era, these new environments contain the danger of the unknown, distant and intangible. However, for children it is as natural as playing catch-and-take with the ball. We are witnessing the birth of a new childhood that demands of us, the adults, new readings and new answers. From this edge of the comprehension of outer marvels, youngsters are setting themselves in a place of uniformity with grown-ups, given the transformation in correspondences and the disentanglement in the task of data innovation. Schools are not any more the main regions where information flows; it regularly shows up behind what youngsters have officially realized in different spaces, for example, virtual ones. Now, the guardians and the instructor are addressed and the tyke's picture goes to his shoulders, which he is set up to confront. On account of more established youngsters, there are likewise sure inquiries regarding what is anticipated from them, the exercises they ought to do -, for example, sports, craftsmanship, ponder, and so forth.- and about those that continuously move away. To grown-ups we need to control the youngster on his approach to information by offering a scope of conceivable outcomes, mindful not to deplete them because of numbness or absence of inventiveness. The thought is that we likewise given ourselves a chance to be amazed and overwhelmed by this new world: virtual learning.

III. TECHNOLOGY: A NEW WAY OF THINKING

It is at school where children can go through differently oriented teaching situations to promote learning processes around different social situations, including technology with computer. This type of use of technology with computer and electronic tools must be linked to share, exchange points of view, argue, base options. It is a specialized learning space where children can start founding strategies to counteract the risks and dangers involved in their use. Playing with technology implies, then, deepening the effects that the use of this resource has on the child's physical, mental, social and emotional developments. The initial education aims to develop a series of cognitive, psychomotor, social and emotional skills according to the individual processes of each of the children, as well as their context. The organization of these learning is under the responsibility of teachers and must respond to a vision of learning and teaching determined by the educational institution. This vision, explicit or implicit, is evident in the strategies; distribution of time; materials and activities that are carried out and applied, and determine the quality criteria of the service offered. There is no doubt that there are parameters regarding the basic characteristics of a good training project for young children. At present, educational institutions offer the use of information technology as a criterion of quality. Although this is important, the theoretical model of child development is also fundamental, as a point of departure, to select, among other factors, the didactic resources that will be used with children and their families.

The utilization of tools and human language are two essential basic social type conduct of a kid. The family, the neighbors, the friends, the teachers, the companions, the activities that are shared and the objects, operate in the children not only as a facilitation for the group insertion, but also as trainers of psychological activity in the shell of the maturational processes of the brain in this stage of life. This aspect is essential for the development of affectivity, imagination, creativity and self-esteem. The human brain is designed to learn, mature progressively and laborious from before birth and throughout the life cycle, with a wide openness to experience through processes of appropriation, development, modification and filing. Functional maturation is determined by the genetic information that the individual brings and provides the functions that will give rise to basic skills; while the experience is enriching these skills, transforming them into skills at the service of creativity and cognitive and social growth.

The human brain is governed by the principles of economy and efficiency. For this, processes tend towards specialization, functional sophistication and automation. In this sense, it is important to identify the rhythms and maturational modalities of each age group and to choose the teaching resources on scientific bases that guarantee optimal results. Small and Vorgan (2009) describes that recent research shows that in front of the computer, one hour a day produces significant changes in neuronal connection. These changes have to do with the acquisition of new skills, distancing people from fundamental social skills. It is therefore important to question the form and results of the insertion of computers in early childhood education, because if this happens with the brains of adults, it is worth asking what happens to children whose neuronal circuit is more plastic and malleable. Likewise, we must reflect on the structural and functional effects of a prolonged exposure to the virtual space in the "digital natives" on their ability to learn, remember, feel or control impulses, and on the development of new skills that will allow them to be managers of incredible Progress in science, literature and the arts. On the other hand, as we have said, for adults the

challenge is different because they need to adapt their brain to new technologies so as not to be left behind politically, socially and economically.

It very important that adults, young people and children dominate the digital environment making the most of its effectiveness, but without losing their humanity. Therefore, among other contributions suggests the importance of reducing dependence on new technologies, recovering interpersonal communication skills and reducing technological fatigue by moving properly in the digital environment. The educational system has an enormous responsibility in the way that neural circuits are modeled and optimized in favor of an integral development in children and young people, so that in this way we can successfully survive the most rapid and important adaptation that has been experienced. the brain in thousands of years of evolution.

One consideration that must be taken into account is that computers are stimuli for the brain, on which we must take special care to graduate in terms of frequency, intensity, duration and opportunity. For example: if we place children in front of a certain virtual activity, they create a focus of cerebral excitement that diffuses throughout the cortex, to later concentrate on a certain function, such as finding certain figures. Therefore, the first thing to do is let the child explore the game, to later help him to consider the indications of the game. Teachers often make mistakes at this point and give directions without letting the child exhaust the exploration of the material with their own resources and styles. On the other hand, if the educational software has a very large amount of images and sounds or the amount of details to be discriminated is high, it causes an over-excitement that exceeds the threshold of attention of the specific meaning involved with hearing or vision and, therefore, the child leaves the activity quickly, or is disturbed. In the same way it happens when we present to children educational software that demand skills or abilities that do not correspond to their abilities or that have not been exercised with the use of direct experiences, on which they must demonstrate a basic command to move on to other levels of thinking. Therefore, each material must be analyzed according to the degree of visual, kinesthetic and auditory stimulation, among others, in relation to what is its meaning for children, in order to evaluate that it has an appropriate balance. It is worth mentioning that educational software generally presents stimuli that do not act in isolation, forming a complex sequence that allows for an important systematizing activity for learning. For example, if the game involves arming pairs of objects located in different positions, or completing missing pieces in a figure; and if there are two new stimuli that maintain this same relationship, the organism is able to react in the same way. This has to do with the generalization and application of learning in similar contexts, because a specific form of thinking is generated. In this sense, it is recommended that the teacher analyze each of the activities of the educational software used in their programming to identify the skills, necessary or implied, that the child requires to master previously. In this way you will be able to find the most appropriate guidelines that you should provide and the most appropriate time to do so. Likewise, the teacher must verify the exercise options that the software must provide the child without taking it to situations of losing or win, which are not formative for a moral development in consolidation process.

As we know, in the first years of life, the nervous systems of the child is in the process of maturation and the development of synaptic connections is unstable, forming and losing with the same ease, depending on the quality of experiences that stimulate it. Therefore, educational software has a substantial advantage over the activities that the teacher performs in real time, since it is possible that children can repeat the games as many times as they want, managing better the changes of activity without affecting the basic processes of the superior nervous activity of the brain of children, that is, maintaining or favoring the obtained learning. As it is observed, the development characteristics of age groups must be kept in mind as children go, chronologically, gaining vital experience. In addition, the time of attention and action of children against them, or different stimuli, increase because neurons are demonstrating their progressive ability to resist sustained stimulation.

This aspect is very important to identify the most appropriate computer resources for children in early childhood education, because to demand more than what they are capable of, or to carry out a monotonous or prolonged activity, fatigue, disorganization of behavior and a state of cortical over excitation, which limits and hinders authentic learning in children. For all this, the teacher who knows the neurobiological principles that govern the cognitive and emotional social maturation of the child, has in educational software a splendid resource to design their teaching praxis, identifying rhythms and maturing modalities in their students and choosing appropriate computer activities, on scientific bases that provide optimal results.

IV. NEW TECHNIQUES IN INITIAL EDUCATION: RESPONSIBILITIES OF EDUCATORS

There is no doubt that it will be very important to share the enjoyment of technology with our children, as one of the activities they can choose to do in the classroom, such as running, jumping, reading a book, playing at the house or putting together puzzle. The question is to end the false dichotomies of the computer versus physical activity, video games versus outdoor play, and the machines versus playing with friends. They are not some options or the others but both, all in due time and moment, and according to the needs and interests of the children. To the extent that we worry about emotionally literate our kids, both at their home as well as at school, we will be offering other tools to better face the challenges of modernity. We must reflect, analyze and feel where we are going to locate as teachers to face it, to transform what needs to be transformed, to incorporate what needs to be incorporated, but above all to take charge of the part that touches us as possible models in our educational role and as a society.

The present kids were conceived in the age of the Internet. Many are more innovatively keen than the grown-ups allocated the undertaking of educating them. To interface with these children, instructors must figure out how to talk their dialect and end up familiar with the innovation that comes so normally to the youthful. Coordinating innovation implies taking advantage of understudies' interests and fortifying their specialized abilities, all while giving advancing learning openings. Likewise with any new advancement, numerous educators, anxious to stay aware of the most recent mold, essentially make a halfhearted effort of coordinating innovation. In any case, on the off chance that they are to prevail with it, they require more than the movements – they require a profound comprehension of the instruments accessible and additionally significant reflection about how to utilize them to improve learning. What's more, the expanded network that goes with this innovation makes it imperative that educators stretch the significance of Internet security.

Educators can tailor learning encounters to separate among the individual needs of pupils in the classroom. There are three fundamental learning styles: visual, audio-related and kinesthetic. Subjective Learning Styles of Children depicts the qualities of these students and the sorts of exercises in which they best flourish, with the admonition that it is just learning styles being portrayed, to be recognized from psychological styles, i.e. all encompassing, investigative, field-subordinate, and so on. Educators can separate by coordinating assignments to status levels, offering fitting mediation or augmentation exercises as required. Enabling youngsters to choose exercises dependent on regions of intrigue is another incredible method to separate. Offering decisions is a fantastic spark for children. Little gathering work is a standout amongst the best approaches to address the issues of different students in substantial class settings. This dissociation provides central insightful information and also provides a short video of the teacher. The affirmative answer to the question “How to enhance the talents of children?” demands that we begin by specifying some terms. In principle, we emphasize that of all the recreational proposals based on digital format that the market offers for children and young people, it is possible to differentiate two types that are distinguished by the intentionality for which they were created: a) video games and b) educational software. Videogames incorporate different symbologies, for example, writings, sound, music, movement, video, photos, pictures in three dimensions, on a solitary screen. The computer medium allows displaying on the screen phenomena of changing processes. The images produced by the computer can create models of any real, possible or imaginary phenomenon. In this sense, the creation of simulations and virtual environments is becoming increasingly sophisticated and the user has a growing sense of involvement in the stories offered through the screen. Most of these video games are highly interactive allowing the appropriation and personalization of the received message, whatever its nature, and returning the communication. The games can be used individually without significantly altering the dimensions of the proposed game, but they can also be used in group form in one place or through the network. In this case, the number of participants can be very high, as is the case with Multiple User Domains that are played over the Internet. The purpose of this type of materials lies exclusively in entertaining and providing pleasure to the user. Educational software refers to those computer programs that have been specifically designed for formal or informal educational contexts. In other words, they have been made so that users, at home or at school, learn something with them. It is important to emphasize that the need to adapt to the evolutionary characteristics of their potential children makes these materials have a playful nature given the presence of certain conditions:

i) **Didactic conception**: They are based on previous knowledge of children. Provide useful and important information for children; offer exercise, practice, corrections and motivating feed-back. They develop comprehensible film sequences for children.

ii) **Presentation**: They include music and pleasant sound effects for children. - Harmony is observed between the text and the images. - Alternating tension and distension elements in the activities to be developed. - They use humorous elements and create expectations.

iii) **Communication style**: They use symbols, icons, auxiliary function strips, understandable for children, while children in pre-school have not learnt to read and write yet. Provide advice to children, through clear and simple oral messages. They have a structure suitable for children: screen and software content. There is a relationship between texts and images, appropriate to the perception of children.

iv) **Technical aspects:** Familiar operational management commands for children. It is also important to consider the hardware that, using ergonomic devices such as chairs, keyboards and special mouse for children, avoid alterations in the spine, wrist pain, carpal tunnel syndrome and bad habits that can drag throughout life.

v) **General aspects**: They present situations contextualized to the reality of children. - They try to make children identify with the characters and actions. - They offer answers and solutions to the problems presented. - Generate that children make decisions.

Educational software are materials that combine educational and entertainment objectives, which is why some authors also call them edutainment (Díez and Valle, 2004, Ayad and Regas, 2009, Aksakal, 2015). In this sense, they favor the construction and exercise of diverse skills such as:

i) **Cognitive skills**: Creativity, Oral expression, Decision making, Problem solving, Follow-up of instructions, Reading of images, icons and signs, Production of texts and images, Search and selection of information.

ii) **Social skills**: Communication, Cooperation, Tolerance, Peer mediation, Openness to other ways of thinking, Acceptance of different cultures.

iii) **Psychomotor skills**: Fine psychomotricity, Visomotor coordination, Spatial notions: when working with two and three dimensions, they move between the mouse and the screen, between opposite planes. Temporary notions, before, after, first step.

In this sense, the task of teachers is to consider the computer and its programs with educational software as a tool that, conveniently prepared and used in learning activities, becomes a potentially effective means to develop the abilities of the students, planned in the curricular design. This conception allows new technologies to be incorporated into learning situations to generate, fundamentally, the appropriation of knowledge from other fields or the exercise of general or specific skills of child development, while being promoted in children the acquisition of basic computer knowledge fundamental PC information connected to the utilization of said assets. Likewise, educators must make showing proposition in which exercises with new technological advancements are incorporated into the instructional successions of the different areas of the curriculum. These new technologies include computers, radio, and cameras photographic and video, scanner, among others. Within this perspective we propose the free and spontaneous use of children's programs as an initial exploratory moment, so that children gain operational skills on the computer and its programs. This exploratory stage is especially comforting and necessary for the achievement of the most real and genuine learning curricular.

This contact of children with computers also means that different situations of play arise, understanding that this possibility does not reside exclusively in the specific characteristics of the material itself but in the way in which it is selected, sequenced and offered to children; and assuming, at the same time that these mediations will generate, in turn, unsuspected social and cognitive interactions that will not always follow the course imagined by the teacher. At this point, a consideration is needed regarding computer game objects that emphasize its communicative dimension, since educational software are products made by people who express their particular ideas about how children learn, think, feel, They have fun, and how they conceive them. Therefore, through their proposals, the activities they propose, what they include and what is left out, educational software are carriers of content and diverse cultural values, often alien to children. This situation establishes new problems around its "adaptation" to the local context from which it is proposed to socialize the children of the initial level. Every single instructive programming must be dissected and checked in the event that it is true, or in the event that it is just an alluring method to display data about a specific theme. The open source programs, modifiable by the user, establish incipient promises of solution in this sense, but they are almost unattainable for the majority of the teachers due to the high level of technological training they require. It should be mentioned that the proposal focuses on the integration of computers into the classroom as part of the learning process of children, promoting their use in small groups or individually, with or without the participation of the teacher, in specially programmed times of play free or assigned. In this way the teacher places the software according to its programming and the interests and possibilities of each child or group of children. Therefore, the experiences of computer labs are questionable because they take away or take out of context a training process under the responsibility of the teacher, placing it in environments similar to that of adults, despite the decoration they may have. While there are fears about the risk of mischief with respect to youngsters to PCs or the other way around, the arrangement of propensities and the great area and adjustment of the hardware or equipment in classrooms diminishes or vanishes.

V. CONCLUSION:

The learning with new technologies in initial education must happen in a setting of consideration and enthusiastic security that upgrades the development of kids, open the way to better approaches for adapting, closer to disclosure, to innovation, to self-sufficiency, to joy, to joint development, to opportunity. This new look does not mean renouncing the role of educators, but relocating it in a new plane that means:

i) Accept and figure out how to function with vulnerability in connection to times, spaces, accomplishments.
ii) Dismissing that everything can be predicted and foreseen.
iii) Give up the possibility that there are enchantment answers for the customary and complex issues of instructing.
iv) Reaffirm our teaching function as having a pedagogical knowledge that will always be our exclusive domain.
v) Contribute to shaping better approaches for speculation without losing the humanistic feeling of our being and enabling youngsters to create abilities for a superior utilization of innovation in their lives and in our own.
vi) Give up the idea that there are magic solutions for the traditional and complex problems of teaching.
vii) Take risks that re-encounter us with the essence of our teaching task, with creativity and the pleasure of teaching and playing.
viii) Take dangers that re-experience us with the pith of our showing errand, with innovativeness and the delight of educating and playing.
ix) Accept that we can know not exactly our students.

Finally, educational institutions and officials should know that the application of such intervention involves systematic, methodical and genetic changes in the design, planning, organization and development of all academic activities, and

not only include teachers and students , but the elements of the teaching-learning process for all. Time is required for the incorporation and application of ICT in the school environment. Like any intervention, it should be consolidated, understood and accepted by all the artists involved for proper regulation.

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