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Psicopedagogía y TIC en período de COVID-19. Una reflexión para el aprendizaje significativo

Psychopedagogy and ICT in the COVID-19 period. A Reflection for Meaningful Learning

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ABSTRACT

The current work paper aims to analyze psycho-pedagogy and ICT during the COVID-19 period in order to generate reflection for students' meaningful learning in the Ecuadorian educational system. The documentary description and content analysis were used. Psycho-pedagogy and education in general, in light of the documentary review carried out, is facing the challenge of responding effectively to the pedagogical needs created by the COVID-19 pandemic, this implies that in proportion to the traditional approach accomplished in the face-to-face modality, it is located at a crossroads respect to its effectiveness, so the beginning of a research cycle is conceived to know and adapt education to new learning styles, in a social stage based on uncertainty cracking the educational paradigm of certainty.

Descriptors: Computer assisted instruction, computer uses in education; educational software; educational psychology. (Words taken from the UNESCO Thesaurus).

INTRODUCTION

The academic-educational process due to the COVID-19 pandemic has suffered a pedagogical turn in its traditional conception of learning; as it has been necessary to avoid massive contagions in schools and educational institutions. For this reason, the remote modality has changed the current initially scheduled and designed academic period that has been planned in person. So, it requires re-planning teaching to use various resources based on communication and information technologies (hereinafter ICT) available in various social contexts.

In these circumstances, teachers, students and the educational community in general, confront a reality that previously was perceived as easy to manage for developing the academic period using online tools. However, not having sufficient experience in the application of ICT for educational purposes creates a problem in the sense of using such digital resources properly. This implies a break in the educational approach that had been implemented through in person classes; generating, in turn, the need for the teachers to study the relevant strategies and resources to effectively deal with the teaching-learning process during the emergency by COVID-19.

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In terms of the arguments previously mentioned, Psychopedagogy as an auxiliary discipline of education proposes configured alternatives to the current reality, that is, it allows projecting how the students should be approached so that they have a greater chance of generating significant learning in line with their social reality. In this regard, Ortiz & Mariño (2014), indicate that "psycho-pedagogy is a science that deals with its own problems, theories and methodologies linked to the training and development of students and educators, not only in school contexts, but also in the family and in the community "(P. 30).

Considering the previous definition of Psychopedagogy in the historical moment in which we lived, it is necessary to highlight that the virtual modality requires attention from the teachers and the students; in addition to the inevitable participation of the family as immediate support because it is necessary to develop learning mediated by ICT in a new environment such as home to promote the required students' confidence for successfully fulfilling their academic commitments (Hernández, 2018).

It is there where the educational psychologist, together with the teacher, must know the diverse social realities of the students, in this way, they will be able to design didactic strategies in order to encourage learning that is consistent with educational quality (Messi, Rossi & Ventura, 2016). Therefore, it is unavoidable to renew the guiding role of the teacher, as this helps to focus the students' potential for encouraging learning in line with current reality (Rojas-Valladares, Estévez-Pichs & Domínguez-Urdanivia, 2017).

This represents an indubitable challenge for teachers, psycho-pedagogues, families, students, and educational authorities, since it is necessary to reinvent education, based on established pedagogical foundations of disciplines according to virtual learning. However, when facing an emergency without a background, the trial and error could be developed to capture the appropriate educational approach, a situation that could generate stress, negative emotions, in the participants, being recurrent to involve new planning modes where the emotional management may be included in the context of

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education by emergency situation (Vallejo-Valdivieso, et al, 2019).

In this scenario, teachers have had to resort to educational innovation as an ally for applying adequate tools in the learning process (Jiménez-Galán, 2017). This also implies investigating, on the progress, about the events for learning by doing in a global and dynamic society.

Regarding ICT, it should be said that these do not escape from the reality emerged, because they were not consolidated as an educational model before the pandemic, even, within in-person educational systems. Therefore, among ICTs, psychopedagogy, teaching and learning, there is an accumulation of pedagogical strengths and weaknesses that must be studied during the development of the emergency period with the purpose of documenting learning from practice scientifically as well as pragmatically respect to the successes and errors that may arise. Based on the above, the current role of work in analyzing psycho-pedagogy and ICT in the COVID-19 period is presented, with a view to generate a reflection for the meaningful learning of students in the Ecuadorian educational system.

METHOD

For the current reflection article, the documentary description and content analysis were used, through the review of writings related to the research topic. Besides, the level of investigation was exploratory, since the educational dynamics was in development due to the emergency and it allowed addressing theoretical antecedents in order to progressively build a conclusive investigative work, this being the first phase of work by researchers.

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ANALYSIS OF THE RESULTS AND DISCUSSION

Psychopedagogy and ICT

The application of ICT for psychopedagogical purposes constitutes an alternative to serve students in the period of educational emergency, however, before the pandemic, it was recurrent to sensitize teachers and students about the effective use of this modality, which generated the urgency to do it in the current time characterized by uncertainty (Farías-Cedeño, Iñiguez-Auquilla & Suárez- Romero, 2019).

Therefore, the educational approach in homes as part of the emergency by COVID-19, leads to consider whether the model of homeschooling or home education (Aliaga-Castillo, 2017), could be an alternative as a pedagogical approach to consider students' interests and learning motivations together with their families.

Regarding this approach, ICT according to Perochena-González & Matilde-Coria (2017), focus on the need to generate personalized attention for students by projecting themselves in the construction of identity. In other words, the guiding role of the teacher in conjunction with the psycho-pedagogical application through ICTs, must involve personal growth as a factor allied to learning, which allows constituting an education that puts its essence into practice. Therefore, it is necessary not to lose sight of such a premise, even more when remote classes become obligatory through the use of technological devices. On the other hand, what is stated cannot affect the socialization of education itself, since educational institutions are spaces where students grow in relation to the exchange of values and behaviors with their peers and learn to comply with regulations, among other factors.

In this way, the role of the professional educator transcends from the usual context to the communities and homes, taking into consideration educational psychology as a means to focus the interconnection of learning with the global reality that is characterized by uncertainty and complexity of social events due to COVID - 19 (Sánchez-Cabezas, González-Valarezo & Zumba-Vera, 2016).

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ICT and Meaningful Learning

ICT as a transversal axis of learning (Nájar-Sánchez, 2016), contributes to promoting the significant empowerment of knowledge, since it is based on the search and processing of information, a situation that allows the student to tackle the research-centered approach as a learning perspective that produces changes in mental structures, because the information is set to be processed and applied in order to solve problems in everyday life (Briceño-Ruperti, Vallejo-Valdivieso & Moya-Martínez, 2019).

One possibility of promoting meaningful learning is by carrying out productive projects through ICTs (Lattá-Arias, 2019). In this way, the students have the opportunity to put into practice the various competences that they possess; it also allows them to discover new skills, coupled with cooperative and collaborative work with their partners from virtual environments. Therefore, articulating an educational model from this perspective that can meet academic needs and solve social situations in the midst of the emergency by COVID-19, would grant both psycho-pedagogues and teachers to know the strengths and weaknesses of students in their guiding roles and in the design of work plans that help them to overcome the disadvantages of accessing an inclusive and quality education.

Psychopedagogy and ICT in emergency by COVID-19

In this period of confinement by COVID-19, part of the psycho-pedagogy should not only be limited to managing processes in relation to the generation of learning in the online classes modality, which has been assumed as a substitute emergency approach for in-person classes, but also, it should consider the situation of students who do not have sociological conditions such as internet connectivity, technological equipment, together with those who have some type of disability that minimizes or prevents their participation in an active way.

This not only forces us to rethink the functioning of educational institutions; but also, the social context based on the economy as a central scenario that cannot be relegated from

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education. In this sense, the historical moment invites us to reflect on the educational event facing the next times marked by uncertainty, which suggests that the time of the rationalist paradigm could be displaced by a new model in continuous construction.

On the other hand, according to the Social Observatory of Ecuador, the participation of students in Ecuador within the in-person modality has been up to 96%. This statistic can be taken as a reference to compare with future research that would allow establishing the dropout level in 2020, in order to confirm that Ecuadorian education has not been generated fundamentally from online classes. This has repercussions in the field of psychopedagogy because this reality leads to study the consequences that could be generated from the emergency by COVID-19.

Regarding educational innovation, it is necessary to create laboratories where virtual resources could be designed for learning in correspondence with psychopedagogy. This would permit avoiding improvisation or trial-and-error that could be originated due to teachers and students are not pedagogically accustomed to the use of ICT, with a model focused on inquiry and problem solving, which promotes student skills.

In reference to the most widely used platform in Ecuador during the emergency period, the use of WhatsApp has become evident as the most accessible and manageable resource for the student environment. This has an impact on the need to design psycho-pedagogical strategies, since for stimulating meaningful learning under a multidisciplinary action it should be considered socio-economic level as well as the proper training to use the platforms or resources that lead to the achievement of complex knowledge.

The possibilities of implementing various options of virtual environments in light of virtual reality, makes it easier for teachers to learn about programming, to design their own resources and learning environments contextualized to the needs of the audience (students). In the same way, it makes students contribute to the construction of these resources, learning programming and other computer skills that motivate them to learn topics or content concerned with multiple logical-mathematical processes for their

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metacognitive development. Furthermore, it enables psycho-pedagogues and teachers to work cooperatively in the design and implementation of strategies for promoting metacognition (Mato-Vázquez, Espiñeira & López-Chao, 2017).

In this respect, Valenzuela (2019) highlights the importance of implementing metacognitive strategies; however, he considers that its effect on mental processes such as rambling and creativity still needs to be confirmed, being here the area where psychopedagogy finds a possible line of investigation and intervention, with the purpose of responding to the cognitive gaps evidenced so far, added to the need to discover behavior in the face of learning during the state of emergency by COVID-19.

CONCLUSION

Psychopedagogy and education in general, in light of the documentary review carried out, is facing the challenge of responding effectively to the pedagogical needs created by the COVID-19 pandemic. This implies that in proportion to the traditional in-person approach, it is located at a crossroads respect to its effectiveness.

Hence, the need to start a research cycle that addresses the experiences of teachers in order to know the evolution of psychopedagogy in the health emergency is conceived. This, in order to adapt education to new learning styles, in a reality based on uncertainty, where the educational paradigm of certainty breaks down and the inequality gaps in internet access and virtual pedagogical resources transcend.

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