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Educación por competencias: Un reordenamiento curricular durante emergencia escolar por COVID-19

Competency- based learning: A curricular rearrangement during school emergency by COVID-19

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ABSTRACT

The reflection article has as a purpose to analyze competency- based learning as a possibility for curricular rearrangement during school emergency by COVID-19 in Ecuador. A bibliographic review of research published in peer-reviewed journals was generated in order to know the scope of the competency- based learning and how this could contribute to the formation of a curricular design that reorients the educational process in Ecuador. It is intended that the students could be formed to get involved in learning throughout their life, in a self-directed way and could even be considered self-taught, which, accompanied by research, will allow generating complex competences for the construction of solutions to the multiple problems faced in everyday life. In this way, they will perceive the need to transcend the cognitive model to that of active learning, making educational design possible based on the pillars of the competency- based learning.

Descriptors: Active learning; practical work (learning method); life skills; skills development. (Words taken from the UNESCO Thesaurus).

INTRODUCTION

The conventional educational systems focused on the in-person modality, have been surprised by the COVID-19 pandemic due to the SARS-CoV-2 virus; in this regard, they have had to assume the school period that was in development or about to begin as an emergency in other geographical areas. That is the case of the coastal regime in Ecuador, which has had to be redefined to provide home care for students.

This has implied moving part of the planned topics in the face-to-face interaction to the online one by designing new ones in accordance with the ICT approach and the various technological resources through which learning can be promoted; however, those who habitually carried out pedagogical tasks in the in- person classes and made occasional use of ICT to promote learning, have been surprised to take on a new educational modality.

This has generated uncertainty in all the educational fields that have been doing their best for using the ICT approach with the intention of helping students avoid repeating classes and, in this way, justify payment within the education sector. In short, these are

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key circumstances to take the competency-based approach as an option to promote educational proposals in favor of ordering that uncertainty generated by the COVID-19 pandemic. In this sense, Robles-Haros & Estévez-Nenninger (2015), states that:

> It is necessary to add that the competency-based approach does not come out of nowhere; it arises from a very well-structured project and in consensus with many countries, both in the European Union and in Latin America. For this reason, the educational community must be prepared to the use and implementation of new approaches or teaching-learning models, looking for benchmarks of success, to achieve the interest of teaching staff by verifying the usefulness and benefits that it will have on students (p. 10).

The ideas aforementioned imply that this approach is designed with particular intentions to educate for promoting an alternative learning to that known as conventional or cognitive based on the apprehension of knowledge. In this regard, the competency-based education is based on constituting the classroom in an environment where learning is done by simulating actions of real life and, where the students have the opportunity to demonstrate abilities, skills, design, innovation, acts, among others, that is, qualities that allow them to integrate knowledge and operations as well as the required aptitudes outside the school environment that provide answers to multiple particular and social needs.

In addition, Díaz-Díaz (2017) highlights that the competency curriculum fosters "the development of complex skills that allow students to think and act in various fields". Competence is also understood as "a combination of skills, abilities and knowledge necessary to perform a specific task" (p. 1); as a result, it has been assumed by companies for the permanent training of human talent, thus this approach is related to technical training, as well as dual education, therefore, it becomes versatile to be applied in various realities and social contexts in order to respond to their needs.

Competency- based education is energized on the basis of promoting learning to learn, learning to do, learning to think, learning to communicate, learning to live together

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(Roegiers, 2016); in this respect, it opens up the possibility of designing curricula where learning is promoted with a complex vision of reality in order to manage favorable actions so that the student can transversally act for achieving goals proposed in academic planning. Therefore, (Germain & Pérez-Rico, 2014), indicate that the competency-based approach contributes to the student's empowerment of knowledge, through permanent inquiry into the multiple concerns and questions that arise when developing a certain project.

Moreover, Competency-based learning focuses on the students, promoting changes in their conception of perceiving reality, in addition to their educational role (Burgos-Briones, Pico-Barreiro & Vélez-Zambrano, 2019). It forces the teacher to promote new perspectives of educational planning, since considering this approach; it diverges from the conventional modality of education in terms of its philosophical curricular conception (Vallejo-Valdivieso, et al, 2019). From that point of view, the curriculum should not be conceived as a mere technical document but as an opportunity to build social changes (Garzón-Daza, 2017), requiring the teacher to transform educational reality into an active and innovative field.

On the other hand, (Casanova-Romero, et al., 2018) indicates that in the Latin American countries where it is said to work with the competency-based approach, there is no evidence of a competency-certified evaluation system, which is essential because the teachers should not only know what is evaluated, what is learned and how it is learned, but also they should take into account the demonstration as a necessary strategy to prove the achievements of the participants in their learning process.

In the case of Ecuador, certification for labor competencies has been promoted (Ecuadorian Professional Training Service - EPTS, 2016), which has allowed people who pass the theoretical-practical tests to be accredited with credentials for carrying out a certain work, which constitutes an immediate antecedent to incorporate in the national educational system. Another reference is dual-technological education that has been

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promoted in the country's technological institutes in conjunction with companies, which according to (Carvajal, Romero & Álvarez, 2017), this could contribute to better preparation of the students for their insertion into the labor market, as they receive the accompaniment of a business tutor (Zavala-Alcívar, García-Loor & López-Figueroa, 2019).

The aforesaid suggests the possibility of projecting the competency-based approach as a pedagogical alternative and reorienting the curriculum in light of the COVID-19 pandemic that has forced the virtual assumption of emergency as an alternative to meet the academic period in Ecuador, which opens up the possibility of designing a competency-based curriculum to train people on the new social requirements of the digital era. In this case, students could be educated both in cognitive and in operational processes at the school level, with the purpose of adapting them to the requirements of a global society where the internet constitutes a new source of employment.

Due to all the above, it is specifically intended to present the reflections developed around the analysis carried out on the competency-based education approach as a possibility for reordering the school emergency curriculum caused by COVID-19 in Ecuador.

METHOD

For the development of the research, a bibliographic review was generated and content analysis was applied as techniques for the collection and processing of documentary information from research published in peer-reviewed journals in order to know the scope of the competency-based education and how this could contribute to rethink a curricular design that reorients the educational process in Ecuador. As a consequence, all the areas of work were ordered in an effort to develop the students' cognitive process and their skills from the logical – mathematical, linguistic spatial and educational computing point of view to configure operations on the internet that interconnect the

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telework network in this digital age.

RESULTS

Competency-based Education

The vision of competency- based education requires generating a philosophical vision of understanding educational reality from a perspective that promotes the conditions for evaluating learning in both teachers and students on the basis of this approach (Vidal-Ledo, et al. , 2016), so the application of this curricular trend must be the product of strong reflection and prior testing to avoid the possibility of applying experiences that do not correspond to the essence of this educational model.

In addition, (Bicocca-Gino, 2017), comments that the competency-based approach has received criticism for its economical aspect of training, being necessary not to neglect the competence referred to critical and ethical reading of social reality, as this allows the student, not only to be trained, but also to be fully prepared. Besides, this approach is primarily based on the cooperative and participatory work of the participants, with which a construction of knowledge in complexity of actions is articulated to achieve a certain end.

From another point of view, (Ríos-Muñoz & Herrera-Araya, 2017) consider that the evaluation must be kept within a formative process in pursuit of promoting self-regulated learning and self-learning; likewise (Bermúdez -Bedoya, 2016), supports the implementation of training programs to facilitate teachers and students' significant changes in order to effectively assume learning to learn.

On the other hand, Pulido-Cortés & Gómez-Gómez (2017), comment that "learning is located in the structures of thought, in the process, in the activity and in the possibility of confronting everyday knowledge with scientists" (p. 9); thus, an articulated training is formed where the construction of knowledge supported by technologies and other resources is promoted in accordance with the goals set by the work team.

Learning to do is projected as a pillar through which students have the opportunity to

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integrate theory with practice, this being one of the fundamental challenges in today's education (Arteaga-Valdés, Armada-Arteaga & Del-Sol-Martínez , 2016). In the same way, (León-Salas, 2015), emphasizes that learning is done with the support of the teacher, who plays the role of tutor or advisor to build a certain project as a team, taking into account previously established goals.

Learning to communicate is transversal as much as it generates the possibility of working introspection as a method for the search of the being by learning internal communication as a process that contributes to methodical reflection in order to generate commitment to learning, as situations of daily life (Narváez-Montoya, 2019). Therefore, it must be complemented with an assertive communication that allows an external one, since this contributes to effectively transmit what is really intended to express (Cañas & Hernández, 2019), being essential today, to interact through ICT, which could be classified as a technology-based communication that contributes to the improvement of cognitive abilities (Vértiz-Osores, et al., 2019).

Learning to think is a challenge for current and coming education, since there is a risk in taking on the virtuality as mere instrumentality to solve the academic period in the midst of COVID-19, leaving aside the complexity of thinking for the reflection (Maldonado, 2015), since in the competency-based approach, it should be taken as a transversal section to foster students' meaningful learning.

On the other hand, learning to coexist not only with peers, but with the environment, is based on the possibility of concretizing an ecological mentality in favor of a citizenship where ethics intervenes as the axis of social interrelations (Fierro-Evans & Carbajal-Padilla, 2019). In addition (Calderón, 2018), focuses the philosophy of otherness as a doctrine that allows living ethically with balance in the social component, enabling, in this way, encounters with the others based on relationships of capabilities, which contribute to a better education and the integral growth of the persons.

In this sense, within the competency-based approach, various methodologies can be

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assumed, including project-based approach and problem-based learning, which focus on the centrality of the students as the protagonists of the process. So, the teachers become advisors who guide, orientate and accompany the learners, in the construction of knowledge to generate a wide spectrum of pedagogical possibilities for the design of a curriculum that currently must respond to a society based on the digital field.

In this context, it is evident that the competency-based approach, developed by some of the active learning methodologies, pursues that the students could be trained to learn throughout their lives in a self-directed way. Therefore, they could even be considered self-taught due to they could generate complex competences though research for the construction of solutions to the multiple problems that they face in their daily life.

CONCLUSION

The competency-based education approach constitutes a curricular alternative to reorient the Ecuadorian educational system in favor of training not only due to the emergency of COVID-19; but also to overcome the integral weaknesses that have been revealed in society. That is why it is essential to educate for living in mutual respect and to respond to a global community based on technology and virtuality, which leads to reducing the traditional field of employment in all areas.

This situation leads to reflect on the role of education, perceiving the need to transcend the cognitive model to that of active learning, making possible an educational design based on the pillars of competency- based education. For that reason, it is necessary to sensitize and train for transcending the socio- educational status quo focused on the transmission of content and generate a model concerned with the demands of the reality. Considering these aspects, the researchers plan to collect empirical information in a second phase of research with the intention of presenting a curriculum proposal based on the competency-based approach.

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FINANCING

ACKNOWLEDGEMENTS

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