EDUCATIONAL INNOVATION, A TREND OF DISSEMINATION AND RESEARCH INTEREST

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La innovación educativa, tendencia de divulgación e intereses de investigación

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Introduction

When navigating an innovative educational model that tries to blend traditional ways with society's new ways of knowledge appropriation, it is commonplace to resort to clichés and try to adapt traditional models to the new ways of consumption of users (Melendez Araya & Hidalgo Avila, 2019). In some successful cases, this shifts into enhanced hybrids, but some cases are just failed attempts at applying the languages required by information and communications technology (Straker *et al.*, 2018).

Undoubtedly, adaptation to these transitions is evident when the job market starts demanding new challenges from education. This way, students and teachers consider it indispensable to develop the teaching-learning process from a perspective that strengthens cross-cutting and collaborative projects (Tobon, Tobon, Veytia-Bucheli, & Escudero, 2018). This type of projects based on co-creation indicate a joint social training process that takes into account job demand, as well as the generation of new trades and attitudes required by employers from their prospective employees (Ravenscroft, 2013; Butcher, Bamford, & Burke, 2014; Seixas, Saravanan, & Gonçalves, 2015; Patiar, Kensbock, Ma, & Cox, 2017); in this line of literature we can evince the research interest to connect the actors in the educational process with the needs of the job market (Valencia-Arias, Arias, Zapata, Cortes, & Zuluaga, 2018). It is usual to listen to expressions affirming that the job market requires training collaborators with skills that have not been invented as of yet: educators cannot turn a blind eye to this phenomenon (Arias-Velandia, Rincon-Baez, Becerra-Plaza, Mejia-Rodriguez, Salas-Díaz, 2018).

Recently, the Bill and Melinda Gates Foundation showed an interest for boosting education through innovation, moreover, it encouraged the need to learn inside and outside the classroom, face-to-face and online, in groups and autonomously, leaving an important message to the education sector passing on the need to adapt to the job market needs, which less and less requires comprehensive professionals and more specific skills driven

from self-management, research, innovation and technical skills needed for the job.

Among the publication and research concerns are included those identified by articles that explore new ways of creation of smart virtual classrooms (Songkram, 2018), where the learning model is built together based on the challenges posed by a problem to be solved, and these are some of the models proposed by the literature regarding innovation.

Another trend that is explored by the literature has to do with the ubiquitous possibilities of technologies and virtual environments (Vilanova, 2018). Developments by laboratories (Trujillo, Velandia, Quiroz, Malangon, Ramos, Rodríguez, 2019) and simulators (Patiar *et al.*, 2017) further the restrictive capacities of classrooms. Models applied in medicine, mixed with virtual robotics through the simulation of virtual reality in surgical training (Olasky *et al.*, 2015) foretell a transformation of the cost of medical and educational services. While other ideas – such as virtual archaeology to teach heritage (Rivero & Feliu, 2017), give society the possibility of accessing places that are reserved only for those with enough resources. Aside from highlighting the new e-learning technologies for higher education (Zhuang *et al.*, 2017) with the study of successful models (Florez-Trujillo, 2019), it suggests latent possibilities of said emerging model, which is more and more accepted by society and slowly takes away from traditional education.

The appearance of innovative service methodologies based on fuzzy logic to jointly built interactive learning environments stand out, these are actively adapting to the needs of the actors in the value chain (Su, Chiu Hung, Tzeng, Gwo-Hshiung, & Hu, 2016). As well as the search for solutions upon examining interdependent and feedback problems between several dimensions and criteria of the cloud-based e-learning services (Manjarres, Sandoval, & Suarez, 2018), to create an improvement plan based on fuzzy logic and implement strategic orientations (Su, Tzeng, & Hu, 2016), (Rincon-Baez, Becerra-Plaza, Arias-Velandia, 2019), that will enable the construction and deconstruction of training offers as we know them based on the changing pace demand.

Finally, the concept of innovation as a recurring principle in literature suggests the development of participants' virtual communities who incorporate all of the parties interested in democratic constructions of needs (Fragou, 2020). The prospect of putting business, academia, researchers and education professionals in the same setting, as possible members of the community, interacting on the basis of exchanging information technologies knowledge (Jiang, Cui, & Nie, 2019) outlines the possibility of building a more inclusive education that can democratize people's development opportunities as fundamental axis of society.

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