REDEFINING TEACHING AND LEARNING VIA NEW INSTRUCTIONAL DESIGN TECHNOLOGIES

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Abstract

The last century has seen the development of educational psychology and learning theories, as well as the development of various models to facilitate the design, development, and implementation of formal training and learning regiments. Recent scientific and technological advancements created new opportunities to reshape or accelerate learning processes and designs resulting in a plethora of promising avenues for learner engagement and improvement of teaching and learning practices, and redefine what was thought to be possible before. What pathways are currently trending in the field and what are the advantages and disadvantages for educational leaders looking into the future?

With the advancement of technology, ease of use, and the benefits that follow in many aspects of everyday life including in learning, educational research has shifted its focus from the previously dominant philosophies of behaviorism and cognitivism to a more encompassing constructivist and connectivist ideology which promotes the use of technology in creating collaborative and socially inclusive instructional interventions. Based on such changes in the perceptions of how learning takes place, different pathways for designing and delivering learning have emerged.

There are many new ways that current instructional design and technology allows for improvement in teaching, training, and learning to occur. With the advent of computer platforms specifically created for managing learning in the new era, the expected increase in using the online medium for delivering learning has been ongoing for almost two decades. Along with that new paradigm, shifts in the way content is designed and delivered as well as theories supporting these ideas have been constant. Technology innovations, such as in telecommunications and social media, entered the playfield and demanded a rethinking of current instructional design practices. Ideas, such as adaptive learning, simulation technologies, social learning, mobile learning, informal learning, cybernetics, gamification, and augmented and virtual reality are some important trends in the field that aim to act as a catalyst in the way instructional design and training takes place. This presentation aims to discuss several of these available technologies and their advantages and disadvantages for educational leaders considering the adoption of one or more of such approaches.

Keywords: Instructional design, educational technologies, edtech, adaptive learning, simulation technologies, mobile learning, cybernetics, gamification.