

Chapter 93

Emergent Pathways for the Future of Instructional Design

Pascal Roubides
Broward College, USA

ABSTRACT

This chapter aims at providing an overview of the entire field of instructional design, starting with a brief historical account of the field but focusing on current and promising trends for the future of instructional design based on advances in instructional technology and human-computer interaction capabilities. The discussion encompasses several parallel trending areas, such as adaptive learning, digital storytelling, gamification, simulation technologies, augmented reality, cybernetics, the xAPI standard, mobile and ubiquitous learning, as well as implications of these trends for the field from both the theoretical and practical point of view. Even though this discussion is by no means an exhaustive account of these trends, it is the aim of this monogram to provide a centralized literature review of multiple paths currently being carved in the field and a glimpse to a multiplicity of potential futures for all those involved in designing and delivering learning or effecting human behavior and performance change.

INTRODUCTION

Instructional design is considered by many to be a “newer” professional field even though activities revolving structuring learning have been present since antiquity. Present day definitions of the term “instructional design” include the ability to use technology to analyze, design, develop, implement, and evaluate learning and performance inducing processes and resources (Reiser & Dempsey, 2007). The historical era of the field spanning the last century has seen the development of educational psychology and learning theories, as well as the development of various processes (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 to improve human performance practices and redefine what was thought to be possible before.

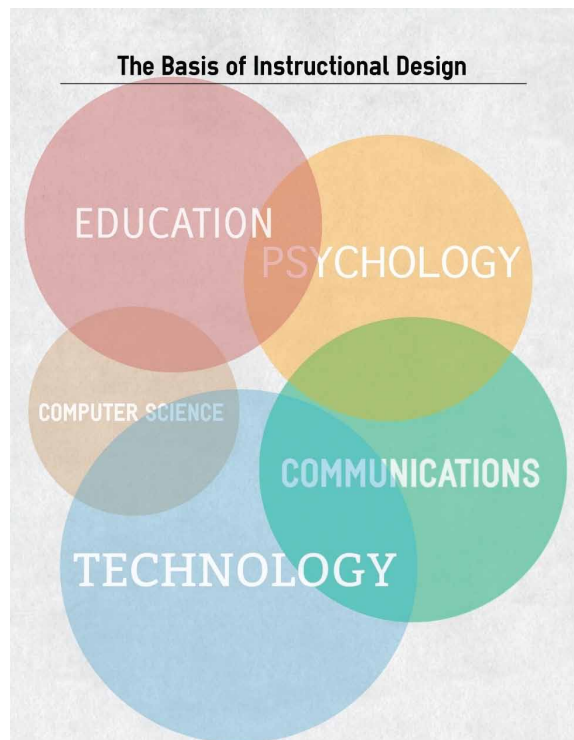
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By virtue of the broad definition of the field, instructional design can be thought of as being in existence since antiquity from the methods developed by ancient Greeks, such as Aristotle, Socrates, or Plato, focusing on cognitive approaches in their teachings to current instructional design practices of infusing the latest technological advances into instructional developments. Other areas are also contributing in what we speak of today as instructional design as posited by Reiser and Dempsey (2007): “The field of instructional design and technology (also known as instructional technology) encompasses the analysis of learning and performance problems, and design, development, implementation, evaluation, and management of instructional and non-instructional processes and resources...” (p. 7). In order to accomplish this broad range of tasks, fields such as computer science, psychology, communications, and related technologies must be accounted for within educational systems approaches to accomplish the stated goals (Figure 1).

A BRIEF HISTORY OF INSTRUCTIONAL DESIGN

Just like all fields undergo changes over time, so has the field of instructional design also undergone its own long period of formation as a professional field, and of course a lot of transformation has also taken place to what we now consider instructional design. A brief overview of some of the latest developments in the field in the last one hundred years are discussed in the sections that follow.

Figure 1. The underlying base forming instructional design



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