

Online teaching and learning is rooted in distance education. Each generation of Distance Education builds upon prior learning perspectives and accounts for associated economic, social, educational, epistemological, communication, and technological drivers. These generations date back to the 1800s and provide us with insights on how online teaching has evolved. In the paragraphs to follow, we will explore how Five Generations of tradition in distance evolution have informed online teaching and learning today.

Background

Let's begin by defining distance education, as planned learning that normally occurs in a different place from teaching, requiring *special techniques* in course design, instruction, communication via electronic and other technology, as well as special organizational and administrative arrangements. (Kearsley, 1996). Also, worth noting is that there are numerous genealogical models used to document the development of Distance Education. For purposes of this paper, however, we will use the Five Generational Model developed by Moore and Kearsley. Specifically, correspondence, radio and television broadcasting, combined approach, tele-learning, and online delivery.

In Moore & Kearsley's Model, First Generation instruction was conducted via correspondence and utilized print medium. This was the launch of distance education and marked the shift from educational instruction that was location centric, offering learners in remote and isolated areas access to educational opportunities. The Second Generation included the addition of radio and television as methods for delivering instruction. This model placed greater emphasis on learner

autonomy. The Third Generation of distance education involved the use of computers in education, but “did not represent two-way communication over a distance.” (Heydenrych & Prinsloo, 2010) The Fourth Generation saw the emergence of two-way interaction and fostering of collaborative engagement between teachers and students as key. The Fifth Generation of Distance Education was the first generation where curriculum development and pedagogical practices became drivers of new approaches to teaching and learning.” (Heydenrych & Prinsloo, 2010, p. 20)

Through an examination of pedagogy, we’ll now examine how traditions of past generations in distance education have informed online teaching and learning.

“Distance Education” from Past to Present

The pedagogy of past and present genealogical models of distance education have primarily been behaviorism, cognitivism and constructivism to explain how and why we learn. (Anderson, 2008, p. 19). Understanding of these schools of thought and their historical context are important because they enable educators to reflect, improve, reshape and refine their work and contribute to the advancement of teaching and learning. (Harasim, 2012, p. 4).

The Behaviorist Theory focuses on that which is observable and measurable. It is regarded as a breakthrough because of its use of scientific method to explain human action, psychology and learning, it provided empirical evidence that explained the relationship between human behavior and learning. This was the pedagogy of the First Generation during which time learning and teaching was content based and conducted via correspondence.

The Cognitivist Theory rose with cognitive science and computer science rose. It sought to understand the “black box” (or mind) and its role in making sense of the world. Technology and its mind modeling potential are focal points for cognitivist. It was during the Second Generation that radio and television were employed as delivery methods of Distance Education and institutions developed specific content to ensure delivery. The Second Generation integrated elements of behaviorism, but did not offer learners/teachers the two was communication essential to an interactive experience.

The Constructivist Theory was in part a reaction to the limitations of behaviorism and cognitivism. It involves “reconciliation of previous ideas as we encounter new experiences and information” and holds that learners are active creators of their own knowledge (Harasim, p. 12). During the Third Generation delivery was expanded to include computers and behaviorism dominated asynchronous transmission of content. Student competence was determined by their ability to follow instructions and absorb content.

The use of communication technologies that allowed two-way asynchronous and synchronous communication was seen during the Fourth Generation. Distance learning was regarded as a “learning package,” whereby communication was equally distributed between teach, students and content. The pedagogies of the Fourth Generation were (1) behaviorism, cognitivism, constructivism, and social constructivism or (2) constructivism, and connectivism.

While the Fourth Generation theories mirrored those of earlier generations, it saw the introduction of The Intelligent Flexible Learning Model. It was the first generation to acknowledge that advances in technology necessitated changes in curriculum development and

pedagogical practices, which drove new approaches to teaching and learning. (Heydenrych & Prinsloo, p. 20)

Holmberg posits that changes from generation to generation in distance education traditions contributed to the understanding of it as a legitimate mode of teaching and learning. (Holmberg, 2008) So, it stands to reason that as social, economic and technological landscape change, new approaches to teaching and learning were needed. These are what Harasim refers to as paradigmatic shifts or “turning points and milestones in human development.” (Harasim, 2012)

Understanding of these shifts is essential to our understanding of learning because they frame our study of 20th and 21st century learning theory.” They mark significant advances in learning theory and technology. Centrality of the learner has increasingly become distinguishing features of distance education. Educators who were accustomed to simply integrating technology into existing frameworks are being poised to help transform educational practice.

Conclusion

A Distance Education student for two decades now, I have experienced the aspects of the Distance Education Generational Models that have “paved the way for modern distance education. I’ve witnessed changes in methods of teaching and communication methods, ranging from delivery by radio, teleconference, webinars and online courses. As new understandings and technologies are presented, existing theories will be designated as inferior because they no longer represent present reality. (Holmberg, p. 20). This continuous refinement process is, as I see it, a major tradition of Distance Education that continues to inform online teaching today.

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