Chapter 4
A Summary of Four Key Issues Affecting Distance Education

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ABSTRACT
As access to technologies that support higher learning grows exponentially world-wide, it is imperative that companies wishing to make relevant contributions prepare effective tools to address the needs of diverse prospective students and instructors. Through investigating a variety of sources, the author has identified a significant opportunity for massive open online courses (MOOCs) with expertly designed products that are geared to address the most relevant concerns that both learners and instructors have identified as barriers to their adoption. He has drawn conclusions that technology must be aligned to meet the needs of both learners and instructors as both groups respond with unique needs to the challenges that teaching and learning in online environments present. The paper seeks to identify the most relevant concerns of both groups so that the products created will be most applicable to the needs of the learners.

INTRODUCTION
Online learning is known by many names: eLearning, blended learning, mobile learning, MOOC, online education or virtual learning environments. It is reasonable to assume that how people relate to one another through digital content varies directly with their experience with the tools used to deliver it. Consider how people’s knowledge of one another grows exponentially when widespread access to the Internet or to social media becomes available. Online educational opportunities have the same potential to expand individuals’ access and knowledge in learning environments. For clarification, a MOOC is “a model of educational delivery that is, to varying degrees, massive, with theoretically no limit to enrollment; open, allowing anyone to participate, usually at no cost; online, with learning activities typically taking place over the web; and a course, structured around a set of learning goals in a defined area of study” (“MOOCs II,” 2013, p. 1). One might think of this design as an open university, in which a student would choose a stand-alone course from a long list of options. The idea is not a new one: The pre-cursor to the current idea of open online courses originated much earlier in Europe and the United States after the industrial revolution.

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revolution, when large numbers of workers required additional training for employment in factories. In fact, students in Australia were taking correspondence courses from the London School of Economics in the 19th century (Marques, 2013), but the materials were all written and without the aid of assistive technology tools to deliver content.

The advent of the Internet has made online courses much more available to learners around the world. The MOOC model is designed to run mostly independently from the instructor, with data analytics, assessments and remediation opportunities integrated within the course itself. Traditional educational models are predicated on frequent, in-depth interactions among teachers and students in the same room. Understandably, traditional models prove to be quite expensive and often result in inequities based on a community’s access to resources or its particular inclination to support education for its citizenry. MOOCs are often presented at low cost or for free, an aspect that increases their availability to a wide range of learners across multiple social and economic groups (Marques, 2013). For the purposes of this paper, the term MOOC will encompass a variety of self-directed eLearning courses available to users across multiple disciplines. The focus of the arguments following is to address the lack of a clear pedagogical basis for online course development and deployment decisions. As users engage these open source courses, the pedagogy informing their use is likely to improve. In search of expediting this learning process, this paper will illuminate major areas for consideration so that improvements can be made more quickly and efficiently to many web-based learning programs.

According to a U.N. report, among developed nations, in 2015 an astounding 98.5% of households in the Republic of Korea had access to the world-wide web, while in Cuba fewer than 5% did. To better understand the educational challenges for an increasingly diverse world of learners, some of whom are just getting to online learning options, the author reviewed The International Review of Research in Open and Distance Learning, specifically a special issue investigating efficacy of open online courses (MOOCs) and its successive issue exploring factors facing the adoption of MOOCs around the world. Volume fifteen, number five contains thirteen papers from professionals all across the world, and number six includes an additional sixteen. A close analysis reveals several themes that educational professionals must consider when designing quality learning tools for eLearning applications, specifically those in MOOCs: 1) engagement and learning success, 2) MOOC design and curriculum, 3) self-regulated and social learning strategies and 4) social network analysis (SNA) and networked learning tools. Perceptions regarding how emerging markets will influence the design of technology products may prove valuable as well for the reader’s consideration.

ENGAGEMENT AND LEARNING SUCCESS

Cormer, Clark and Canelas (2014) suggest that large scale eLearning “limits the extent of student-instructor interpersonal contact, and this leads to a central question involving how a reliance on peer interaction and review impacts student learning” (p. 27). The impact of this change cannot be understated. How do designers mitigate this pedagogical shift with technology? The authors investigate the effectiveness of peer-to-peer writing to mitigate the diminished ability of the instructors to provide feedback. These Duke professors aimed to discover how peer-to-peer interactions impacted student learning in general and whether students identified as less academically prepared and less self-motivated show a higher level of engagement in both English Composition and Introduction to Chemistry as a result of interacting with their peers in online courses. The data were encouraging and dictate that properly designed