

Associate Editors: **Pamela S. Dickerson, PhD, RN-BC, FAAN**

Barbara G. Lubejko, MS, RN

Author: **Brian S. McGowan, PhD**

The Rise and Stall of eLearning: Best Practices for Technology-Supported Education

abstract

eLearning is a commonly used term in education today, but what does it mean? This article explores issues that nurse planners and administrators need to be aware of in planning how technology-based education is most effectively delivered.

J Contin Educ Nurs. 2015;46(7):292-294.

It is believed that the origins of the terms *eLearning* and *online learning* date back to the 1980s. Over the decade that followed, the opportunities presented by this new type of instruction were widely lauded, as noted in the following statement in 1998:

...nearly 50% of higher education institutions currently engage in some type of online learning. Academic and professional organizations agree that using web-based learning environments can offer sound pedagogical benefits.... The web is revolutionizing some areas of study through increased opportunities for learning and alternative formats for information. (Blackboard, Inc., 1998, para. 1)

However, even in recent years, the study of these now ubiquitous types of instruction has been hampered by the often conflicting understanding of what is actually being explored. For instance, the terms *eLearning*, *online learning*, *web-based learning*, and *distance learning* have been widely used by both educators and researchers. For the purposes of this article, the *eLearning* terminology will be simplified, in keeping with the meta-analysis reported by Moore, Dickson-Deane, and Galyen (2011): (a) *distance learning* simply describes the ability for an educational intervention to overcome geographic constraints; (b) *online*, or *web-based learning*, principally describes education that is accessed through use of the Internet, with the opportunity for connectivity and enhanced flexibility in design and is seen as a newer and improved form of distance learning; (c) although the term *eLearning* (or *e-Learning*) originally focused on computer-based training (Cross & Hamilton, 2002), it is now understood to more broadly describe education that is available through any technology, with the enhanced oppor-

tunity for connectivity and flexibility in design, while overcoming constraints of both time and space.

Importantly, as we simplify the *eLearning* terminology, this is perhaps our first critical insight—the general definitions of *distance learning*, *online learning*, and *eLearning*, although perhaps intuitive to some, fail to adequately describe the nature of the underlying instructional design and educational interventions. Instead, the terms provide a more general description of the experience or opportunity. It is therefore critical for education planners to focus more on the specific design of their education and not rely on catch-all or umbrella terminology to describe the learning experience.

A PROMISE UNFULFILLED

Given this initial insight, we might still accept that the basic promise of technology-supported education seems well validated; with technology, content could be accessed by more learners in more convenient ways, largely independent of geography, and asynchronously (if so desired). It should be noted that the generally established benefits of technology-supported education fall short of proving the impact on attitudes, learning, or behavior change. These cognitive and psychomotor benefits largely depend on the specific interventions being delivered through educational technology.

The simple truth is that technology-supported education can

Dr. McGowan is Chief Learning Officer, ArcheMedX, Charlottesville, Virginia.

The author has disclosed no potential conflicts of interest, financial or otherwise.

Dr. Dickerson is a commissioner and Ms. Lubejko is an appraiser with the ANCC's Commission on Accreditation. Views expressed by them or their guest authors are their own and are not representative of the Commission, except as specifically noted.

Address correspondence to Brian S. McGowan, PhD, Chief Learning Officer, ArcheMedX, 313 2nd Street SE, Suite 207, Charlottesville, VA 22902; e-mail: brian@archemedx.com.

doi:10.3928/00220124-20150619-11

be used to distribute and deliver really good education OR really mundane education—using computers and the Internet is not an educational silver bullet, but it could be a remarkable educational tool. For example, tens of thousands of enduring webcasts are produced each year. These activities, typically composed of simple, video-based content, can significantly impact the reach of the content but have not been shown to have a significant impact on engagement, completion rates, or learning (Mazzoleni, Maugeri, Rognoni, Cantoni, & Imbriani, 2012; Williams, 2014). The convenience and the expanded reach of viewing videos online does not automatically equal better learning.

More recently, Massive Open Online Courses (MOOCs) have emerged as a means of providing nearly universal access to educational content. These courses are usually composed of a curriculum or a connected series of brief, enduring webcasts presented over time. Although we continue to learn more about the MOOCs model, it is generally acknowledged that MOOCs have largely failed to live up to their substantial hype—the dissemination has not been as wide as intended, the audiences have remained more homogeneous than desired, and the attrition rates continue to underwhelm (Ed Tech Now, 2012). Learners still need more structure and more motivation to make the commitment to learn.

More recently, the flipped classroom has emerged as a blended model of online activities, serving to prepare learners for a live event that can then focus more on application than knowledge transfer. Although my colleagues and I have recently had tremendous success with this model using a more data-centric approach, other faculty and instructors have struggled to derive

benefits that match the additional level of planning and resources that are needed (McGowan, Balmer, & Chappell, 2014; Rees, 2014). How the pieces are blended and how data are leveraged is more important than simply giving extra assignments and work to be done prior to the live classroom experience.

The need to critically evaluate these emerging models in technology-supported education is not insignificant. Over the past 10 years alone, more than 68 million clinicians have participated in webcasts as an element of their professional development (Accreditation Council for Continuing Medical Education, n.d.). Clearly, educators could have a great impact if we could optimize each approach and fully realize the potential of the technology.

UNCOVERING THE MISSING LINK

The good news is that each of the examples indicated in this article provides a critical lesson for educators. In short, the ultimate value of technology-supported education is not inherent in technology per se but how that technology and the data it generates is leveraged. From the more traditional webcast, we can learn not only that information can be broadly disseminated but also that technology provides an opportunity to create engaging environments for active learning. These environments allow for new forms of learning data to be collected and explored so that the learning experience can be increasingly dynamic, refined, and personalized. From MOOCs, we can learn that activities can be tied together and that understanding of how learners navigate through a connected curriculum can provide critical insights into what topics or lessons are most interesting and most challenging. From the flipped classroom, we can learn how data-

driven and agile educational design can enhance blended and sequential learning experiences, thus enabling educators to better focus their face-to-face interventions based on the data and insights gleaned from the online components.

SUMMARY

The generalized terminology applied to technology-supported education is often vague or conflicting. We must dive more deeply into how technology and evidence is being used to drive learning. Although technology may present an enhanced opportunity for connectivity and flexibility in design, it will not occur without planning and intention. To derive the posited ultimate benefits from eLearning, the various technologies we choose must be leveraged intelligently to create opportunities to connect learners, structure learning experiences, and collect the critical forms of learning data that must become front and center in the educational planning process.

REFERENCES

- Accreditation Council for Continuing Medical Education. (n.d.). *ACCME annual report data*. Retrieved from <http://www.accme.org/news-publications/publications/annual-report-data>
- Blackboard, Inc. (1998). *Educational benefits of online learning*. Retrieved from http://blackboardsupport.calpoly.edu/content/faculty/handouts/Ben_Online.pdf
- Cross, J., & Hamilton, I. (2002). *The DNA of elearning*. Retrieved from <http://www.internetttime.com/Learning/articles/DNA.pdf>
- Ed Tech Now. (2012, December 29). MOOCs and other ed-tech bubbles [Web log post]. Retrieved from <http://edtechnow.net/2012/12/29/moocs-and-other-ed-tech-bubbles/>
- Mazzoleni, M.C., Maugeri, C., Rognoni, C., Cantoni, A., & Imbriani, M. (2012). Is it worth investing in online continuous education for healthcare staff? *Studies in Health Technology and Informatics*, 180, 939-943.
- McGowan, B.S., Balmer, J.T., & Chappell, K.

- (2014). Flipping the classroom: A data-driven model for nursing education. *The Journal of Continuing Education in Nursing*, 45, 477-478.
- Moore, J.L., Dickson-Deane, C., & Galyen, K. (2011). e-Learning, online learning, and distance learning environments: Are they the same? *The Internet and Higher Education*, 14, 129-135.
- Rees, J. (2014, May 5). The flipped classroom is decadent and depraved [Web log post]. Retrieved from <https://moreorlessbunk.wordpress.com/2014/05/05/the-flipped-classroom-is-decadent-and-depraved/>
- Williams, J.G. (2014). Are online learning modules an effective way to deliver hand trauma management continuing medical education to emergency physicians? *The Canadian Journal of Plastic Surgery*, 22, 75-78.