

IT6750: Current Trends and Issues in Instructional Technology  
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11.2.2008

# Accessible Content: Improving Learning Management Systems

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## Introduction

I am an instructional designer for a mortgage servicing organization, and a Masters candidate in the [Information & Learning Technology \(ILT\) program](#) at the University of Colorado Denver. Engaging in both of these activities provides an environment for me to pursue the theoretical study of emerging trends and technologies in educational technology while simultaneously applying some of these ideas in a corporate environment.

I have worked with media and technology on the corporate level for more than 13 years. The ILT program is a means of formalizing my work experience and a mechanism for acquiring new tools in my educational toolbox. One example of a new tool that I studied in the ILT program and applied at work is the use of [podcasting](#) or [screencasting](#) to rapidly develop and deliver small chunks of instructional content. Specifically, I use this as a quick method of creating user training for the software applications used in my organization. This paper will explore how I believe corporate elearning will evolve in the near future, particularly asynchronous forms of elearning such as the CBT (computer based training), in which content is too often compiled in what constitutes an electronic book, and delivered to a user's PC from a [learning management system](#) (LMS).

My intention is to continue working in this capacity, but to use my education, leadership and experience to earn a more active role in the strategic planning of training activities.

## Futures Forecast – Life Five Years from Now

I prefer to lead actively and do not see myself moving into an exclusively managerial role. Thus, I have taken the role of working manager of instructional design in the training department; a manager whose leadership is valued by the organization and whose philosophy has helped create a more inclusive, unbiased learning environment that helps improve our employees' ability to learn. I believe that corporations need this type of leadership as the field of educational technology continues to mature and technology becomes more available and more effective as a means of providing instruction. Concurrently, our society and workforce have become more diverse creating challenges related to gender, race, sexual orientation and disability. Without considering these issues, less progressive corporations will find themselves left behind, continuing to regard training as a facilitator reading a Powerpoint presentation to a classroom full of homogenous learners and elearning as nothing more than an electronic book.

### ***Efficient, Usable Electronic Delivery***

Organization and delivery of online learning have changed most over the last five years. Originally, technology was considered to be the savior of education. Proponents of technology mistakenly thought that learners benefitted from technology simply by using it. Online instruction was organized like traditional classrooms (Mandefrot, 2001). The LMS was like a bookshelf, stocked with electronic books in the form of CBTs. The PC became the classroom; an anytime, anywhere classroom that was very convenient from a scheduling standpoint, but not convenient as a method of quickly accessing and re-accessing useful information. Another shortcoming was the inability of the user to probe deeper into content--to seek clarity and ask questions (Mandefrot, 2001).

Since then, the LMS has evolved into a much more useful tool. Content is chunked into nuggets of categorized information that are easily searched and easily accessible. Useful nuggets can be bookmarked for easier access later. The user interface is seamlessly integrated into the user's desktop, becoming a prominent part of their everyday experience, like the clock that runs in the lower-right corner of a PC. When the user wants to know the time, he or she simply glances at the clock. Likewise, when the user wants to access a course, procedure or nugget of information, he or she simply browses the LMS Desktop Overlay (LDO) that provides instant access to needed content. The LDO is reminiscent of the [MAC Dock](#), Apple's ingenious desktop toolbar for its operating system.



Like the MAC Dock, the LDO is hidden, yet always available and it is easily accessible with basic mouse movements. Additionally, the LDO provides search functionality, task tracking for assigned and completed learning tasks and easy access to automated and human, real-time support when deeper exploration and understanding is necessary (Karrer, 2007).

### ***The Long Tail***

The evolution of the LMS to a more useful, user-friendly application occurred because educational technology leaders demanded an LMS that was easily accessible and individually customizable. After LMS technology evolved, online content quickly followed. This was inspired by the most ubiquitous and successful content management and delivery system from the digital age: the internet. As the ability to store and deliver goods (via the internet) became cheaper and easier, more of it became available to consumers. This phenomenon is called The Long Tail. The name recognizes the [shape of a line graph](#) when similar product's sales are charted relative to their popularity (Anderson, 2004).

Imagine it is 1973 and the only way to buy music is to purchase a record at the local record store. It costs money to manufacture the record and ship it to the record store. It costs even more to operate the store and the owner has a limited amount of space to hold the records he or she is selling. Most likely, the store will only stock popular records that sell quickly in an effort to maximize profits. If you are looking for the newest album by that obscure indie band, you are probably out of luck. The digital era eliminates many of these barriers by making it cost effective to ship and store less popular products. The Long Tail first came to fruition as the internet became a commercial reality. As internet penetration grew, the tail grew longer. Now, more products and programming are available to consumers than ever before. Not only can I purchase that indie band's album on the internet, but the website from which I purchased it will also recommend other albums that I might like (Anderson, 2004).

So what does all of this have to do with educational technology? Not only is our LMS more accessible and easier to use but now it also has a long tail. Users can submit content through the LDO and it is approved prior to deployment, much like a blog. In the past this abundance of content would have been a problem because there was no place to put so much printed material. Creating it digitally eliminates the

storage problem. Our LMS is also smart. Based on a user's selections, it will recommend and find other content that may also be helpful.

### ***Learning Processes***

By expanding the amount and variety of available content, our LMS appeals to the adult learner on multiple levels. Malcolm Knowles identified six principles of adult learning in his theory of andragogy. Two of these principles state that adults are self-directed, self-motivated learners and that they must believe that learning is relevant (“Adult learning theory,” 2007). The LDO caters to these principles by providing content in an accessible location and by chunking and categorizing it to better reveal its relevancy. Self-directed learners seek out and are more likely to find helpful content. Content must be abundant, easy to locate and available through a familiar interface which is easy to use. If all of these are true a broader range of adult learner is likely to use and benefit from that content (“web search behavior,” 2004).

### ***Recognizing Privilege***

While we have made great strides in our efforts to make learning content more available and useful for our employees, we continue to struggle with the influence that privilege has in our organization over who is successful and who achieves. We know that in most organizations the power structure is male dominated, especially at the top (Johnson, 2006). While our organization prides itself in the number of women and minorities in our ranks, with more focused scrutiny, we noticed that the numbers are weighted heavily to middle management or below. In an effort to address this disparity, we have implemented a mentoring program that actively reaches out to minorities and women to provide opportunity to groups that may have previously been ignored.

## **Concluding Thoughts**

The LMS Desktop Overlay is my idea for where LMS technology should go to create a better learning environment. This is the result of my experience managing and participating in online learning programs. I am not a software developer and I do not aspire to create the LDO myself, but I do see the LDO, or something like it, as being important as educational technology evolves. In the meantime, recognizing the barriers that content accessibility presents and trying to create chunked, categorized content that helps break down those barriers will improve online learning in the face of its current less than ideal state. Creating smaller nuggets of content in different formats, such as podcasts and screencasts, and allowing more user created content and feedback will improve online learning's effectiveness, even without a better LMS. Similarly, recognizing that privilege exists is the first step toward addressing its resulting problems.

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