STRUCTURAL BUILDING COMPONENTS MAGAZINE
March 2005

What Is eLearning? by Charles Palmgren

Okay, so you went on the Internet, found some “eLearning” sources, and are a little skeptical about this training method. Many online courses are quite dry, and “interactivity” means the learner gets to click “Next” and read a page, see a graphic or take a quiz that they could have aced without viewing most of the training. In these cases, the content is not much more than a textbook with flashy text or a cool animation added to an image. It is an inexpensive and reliable way of sharing knowledge, but so much more is possible and desirable. The first thing to understand about this training method is “not all eLearning is created equal.”

WHAT IS “EFFECTIVE” eLEARNING?

eLearning, or web-based training, is self-paced instruction delivered over the Internet, 24/7. This provides for individualized learning by making courses available at the level, pace and style required for optimal learning. Training offers flexibility: students can stop the session to talk with coworkers or take a break without interrupting the class. Web-based tutorials can be completed independently as learning exercises for new users and can be delivered as just-in-time chunks of information. Tutorials may provide the additional ability to interact with the training modules.

A high quality eLearning platform, like WTCA’s Truss Knowledge Online (TKO), accommodates different learning styles by offering printable material, video lectures and demo-related content. This allows students to choose the content most relevant to their new position and set their own training pace. It is designed in short sections and permits a great deal of flexibility. You can access information through a pre-defined learning path or search the data to find exactly what you want to learn at any given time.

HOW DOES eLEARNING COMPARE TO CD-ROM TRAINING?

The goal of the instructional design and delivery of CD-ROM training has been to create entire courses with distinct lessons. Students only have access to the information that can be held on one CD-ROM. In the truss industry, training programs frequently change due to software enhancements and code changes. One drawback of CD-ROM training is that the media must be redistributed whenever there is an update. On the other hand, eLearning has virtually no storage limitations and content can be updated instantly. Each time students connect to the web page, the latest version is automatically available. This is perhaps the single greatest benefit to eLearning.

HOW DOES ELEARNING COMPARE TO AN INSTRUCTOR LED CLASS?

Most live training classes are held at a facility that requires students to travel to receive training. Transportation, meals, lodging and lost production can make live training cost-

prohibitive. eLearning can be done before or after work, or at home without the inconvenience and expense associated with travel. Some additional problems encountered with classroom training include:

- Pressure to perform: Have you ever found yourself in a class where you are the person not keeping up? Most people don't want to be the person the instructor stands beside. Instead, we skip the item we are having trouble with in hope that no one will think we aren't smart enough, letting the class go on and without learning what we needed to. Online classes eliminate this problem. You can repeat the module as many times as you need to feel comfortable with each concept.
- Different learning rates for different skills: People learn different skills at different rates. In the typical class, the students will have to run at the speed of the slowest learner. In the eLearning environment, everyone travels through at their best speed.
- Boring Content: Boredom can have many causes—the pace is too slow, too fast, or the instructor didn't add anything fun to the training. No matter the reason, I have found myself bored in many classes and have left disappointed.

WHAT IS GOOD eLEARNING CONTENT?

The most effective online training invites and encourages students to interact with each training module. In engaging eLearning courses, the use of multimedia such as animation and narration makes the training entertaining and fun. This keeps students more interested in the content. Here are some good eLearning course elements:

- Tutorials: Tutorials are one of the most commonly used modes of education. A good tutorial presents information and guidance, makes sure the learner has an opportunity to process the instruction, and only then continues on to the next concept. Many tutorials consist of a linear presentation of content. When implemented properly, guided tutorials can be engaging and effective.
- Simulations: Simulations, or demos, are one of the most effective training methods, especially for learning new software packages. Students see the screen as if they were inside the program itself and are encouraged to open the software program and the training modules at the same time to practice as they go. This promotes better understanding of how the program works and optimizes the training event.
- Assessments: Online tests are used for self-assessment so students can compare their depth of knowledge with thousands of individuals and track their progress. The latest and most sophisticated technology-based tests are tightly linked to learning objectives, which in turn can help create a completely personalized curriculum. These tests also help course writers to adjust content. For example, if there is a question that everyone takes a lot of time to complete, the programmer can rewrite the question for clarity or enhance the training modules to help students better understand the material.
- To maximize the student's benefit, the most effective eLearning course will combine tutorials, simulations and assessments in one learning project.

WHAT YOU DO NEXT?

- Review the type of training your company needs and the current skill levels of your potential

eLearners. Do they need computer skills, industry or software training? Maybe you are an employee who wants to improve your personal truss knowledge. What kind of material is available for you to create your own plan for learning?

- Evaluate your employees and group them by their learning needs. To keep production up, you may want to have only one or two people training at any given time.
- Find the best time for your people to do the training. Time is always of the essence. You can set up time before or after regular working hours. You may want to have longer lunch breaks and incorporate training at that time. As an owner or manager you may want to create an event and stop everyone for a group training session. Maybe you are the motivated employee who can log in at home and train at night and/or weekends. Whichever way you choose, make sure you have the time to do it. Nothing hurts training more than to begin and never finish. Don't make the training sessions too long. It is better to do small amounts over multiple days than one or two long sessions.
- Talk with your software vendor and get as much information as you can about training opportunities. Many times they can have a lot of content just waiting for your request.
- Check with WTCA. They have a wealth of information waiting for you online. Check out www.wtcatko.com to see what is available for you and your company.

eLearning supports on-demand, personalized learning for everyone. Anytime you want to learn about a new feature in the software or building code, just click on the module you want to see. Anywhere you want to take the training whether at work, at home or motel room when traveling, content is available with any Internet connection. Want a refresher class without having to sit though hours of training, searching through old CDs, or the expense and loss of time to go to a training facility? eLearning is your answer! Just say NO to boring outdated content, and YES to WTCA's Truss Knowledge Online!

Charles Palmgren has spent the last ten years writing manuals for component machinery and help systems for truss design software. In the last three years, he has concentrated on the development of the MiTek Help and eLearning systems. Prior to his work with MiTek, he spent seven years with Alpine Engineered Products.

SBC HOME PAGE

of generating income for another association or corporation, then WTCA, with the approval of the WTCA Executive Committee, will (1) sell the article and all of it can be included in the new publication in its original form; (2) will grant permission to copy and republish all or portions of the article with WTCA receiving a royalty for the sale of each new document published. The royalty will be agreed upon by WTCA and the party requesting permission.

SBC HOME PAGE

The mission of Structural Building Components Magazine (SBC) is to increase the knowledge of and to promote the common interests of those engaged in manufacturing and distributing of structural building components to ensure growth and continuity, and to be the information conduit by staying abreast of leading-edge issues. SBC will take a leadership role on behalf of the component industry in disseminating technical and marketplace information, and will maintain advisory committees consisting of the most knowledgeable professionals in the industry. The opinions expressed in SBC are those of the authors and those quoted solely, and are not necessarily the opinions of any of the affiliated associations (SBCC, WTCA, SCDA & STCA).