Online CE raises several questions. What is it? Do people learn via online media? Is it a good thing? What are the obstacles? Where does it belong and where does it not belong? What does the future hold for online CE? The purpose of this article is to explore these issues and allow the reader to identify if and where online CE belongs in their learning experience.

**WHAT IS ONLINE CE?**
There are multiple types of online learning. Prior to embarking on online learning, you will want to understand some of the vocabulary and choices available. First, let’s divide online learning into either synchronous or asynchronous. Then we will look at the different types of platforms and learning management systems (LMS).

Synchronous learning occurs when a group of people are presented with the same information at the same time. Lectures in face-to-face environments are the historical form of synchronous learning. Web conferencing whereby the learner is on a conference call for the audio/verbal presentation and in front of the computer where the presentation is visually given is the electronic means of synchronous learning. However, there are pitfalls with this approach: videos don’t always play well on these Webinars, conference call lines get bungled, Macs have difficulty on some of the platforms, AND the learner still has to be present at a specific time for the Webinar. Additionally, Webinars tend to be the most costly of online education formats.

Asynchronous online learning is an on-demand recorded event. The asynchronous learning can be interactive with quizzes, activities, and communication with the instructor (the instructor’s response to inquiries, however, is not in real time).

Within the asynchronous learning, there are different types of presentation platforms (or electronic media). The most common platforms, and the oldest, are text based: it is like reading a book chapter online. The newer platforms are audio and visual presentations. The audio and visual are typically integrated into some type of Flash presentation (Flash, an Adobe product, is the most widely accepted streamed content for all computer systems). The visual inputs can be slides, videos, animation, etc. The presentation automatically progresses, giving the student a rich environment where the material is seen on the screen while hearing the instructor and interacting with activities, as well as the ability to pause/resume the material and replay at the desire of the learner.

Whether choosing synchronous or asynchronous learning, there needs to be a LMS wrapped around the presentation platform. The LMS will handle the registration, tracking, and storage systems of the learner activities; the quizzes (if applicable); and the distribution of certificates of completion.

**DO PEOPLE LEARN VIA ONLINE MEDIA?**
First of all, we have no measured learning in the traditional seminar/conference model. Absolutely no evidence of learning in the face-to-face environments! All those years (and money) of CE and no evidence of any learning; we, the people of evidence-based practice, find it amazing that we accepted this antiquated practice for so long.

Some electronic platforms do have means to measure learning. And there are several studies that prove we learn better with online courses than in the face-to-face environment.

So, “yes!” we do learn quite a bit with online education.

**IS ONLINE CE A GOOD THING?**
In addition to the above, here are a few of the other reasons why online CE might be a good thing:

1. Convenience. It can be done at your home or office, and, in the case of asynchronous learning, at the time of your choosing. Depending on the platform, you may be able to pause the asynchronous presentation and resume later at your bookmarked spot.
2. Asynchronous online education tends to be less expensive than going to a conference (and much less expensive than live Webinars).
3. No travel, no hassle, no expense.
4. Less time away from work and/or family
5. More choices of courses since you do not have to select courses based on geographic availability.
6. Can be higher quality in that the best-of-the best material/educators can be scaled to reach all of us.
7. Need last minute CEs for relicensure? Online learning is
always available.
8. Depending on the platform, the following are also advantages of online learning:
   a. The learner can review the course multiple times;
   b. Interaction with the speakers;
   c. Interactive learning with questions and activities for the learner; and
   d. Interactive = interesting (= more learning).

Therapists are smart people. It was tough getting into school (and even tougher getting out). So, if we use our smarts to select the appropriate applications for online learning, we will optimize our learning. But first, let’s look at the obstacles we need to overcome.

OBSTACLES IN ONLINE LEARNING
As with all of life, if we can accurately identify our obstacles, the chances to overcome those obstacles exponentially increase.

#1 OBSTACLE: ONLINE EDUCATION = BEHAVIORAL CHANGE
There are three ways we can deal with change:
   a. Resent that which happens to you;
   b. Consent to that which happens to you;
   c. Invent that which happens to you.

Unfortunately, a and b are much more common than is c. Changing our behavior to online learning is much tougher than the status quo of conferences and seminars. As a matter of fact, change (including our CE practices) can be so tough that Milton Friedman, a Nobel Laureate in economics, calls it the Tyranny of the Status Quo (Harcourt Brace, 1983). Also, think of Galen in 200 AD, who stridently proclaimed many “infallibles” based on his animal dissections. He was refuted in later years—and those who initially refuted him were rejected by the medical society. It was not until about 1770 that medicine began to advance based on the scientific and accurate work of Morgagni and Vesalius. Let’s hope that changing our behaviors to accepting online education does not take the 1,500 years that it took us to base our medical practice on scientific, anatomically correct information.

#2 OBSTACLE: MEDICAL PROFESSIONALS TEND TO BE LOW-TECH
Medical professionals are notoriously slow adapters to technological change. We are a profession that works on our feet with our hands all day long. The amount of time we spend in front of a computer is relatively small. We don’t “dink around” with the computer any more than do with our patients: we just want things that are proven to work.

#3 OBSTACLE: THERAPISTS ARE SOCIAL BEINGS
We LIKE being with people, and tend to be much more people-driven than task-driven. Also, social networking does not meet our social needs. In a survey of more than 1,000 therapists, less than 2% indicated a desire to choose online courses with a social networking component. The socialization that drives us is the human presence of one another. So, some form of conferences/hand-on learning needs to be in our learning model to fulfill that need. Ways to do so are discussed shortly.

So, they are, the three biggest obstacles to online learning—ourselves. If we can face the challenges we present to ourselves, then perhaps we can overcome them, and use online education when it is appropriate.

WHEN IS ONLINE LEARNING APPROPRIATE? WHEN IS IT NOT?
Anywhere we sat in a chair at a conference/classroom and listened to a talking head is the appropriate place for online learning. Conferences and classrooms can be reborn into hands-on laboratory environments. The lectures can all be done online, then we will use our time wisely to travel and attend advanced hands-on learning.

This model of learning is just now beginning. Robert Landel, PT, DPT, OCS, the 2009 recipient of the James A. Gould Excellence in Teaching Award from the orthopedic section of the APTA, now offers his CE lectures on vestibular rehabilitation online (www.educata.com/courseprofile.aspx?c=2 or www.educata.com/courseprofile.aspx?c=4 or www.educata.com/courseprofile.aspx?c=6) and then learners take his hands-on labs (www.skillworks.biz/8.html). In Landel’s opinion, “This is a great model for both the learner and the educator. As an educator, I can use my time wisely by not repeating lectures on topics that the learner can review independently—I can use that time, instead, to answer questions on the material and deepen the learner’s understanding. This leaves more time for hands-on labs, which, obviously, can’t be done online. Being able to progress through the lecture material at one’s own pace is a distinct advantage for the learner. In addition, the learner’s time with the educator is maximized, focused on meeting his or her needs in a true learner-centered instructional approach.”

Likewise, Dale L. Avers, PT, DPT, PhD, CHP, (www.educata.com/ professorprofile.aspx?id=7) and Patrick J. VanBeveren, PT, DPT, (www.educata.com/professorprofile.aspx?id=8) are who are pioneers in gerontology and leaders within the APTA, are offering hands-on labs in conjunction with the California Physical Therapy Association (www.ccpta.org/displaycommon.cfml?an=1&esubarticularbr=114) to complement their online lectures. “The model of providing the lecture content on-line gives me the opportunity to follow up with the learner to identify unclear points and to focus on the application of the material. Since learning comes with repetition, the model of a combination of online learning and hands-on workshops that build on online material is ideal,” says Avers.

So, online lectures followed by hands-on labs is one model of incorporating the best-of-the-best lectures with guidance and direct supervision in the labs.

WHAT IS ON THE HORIZON FOR CE?
Undeniable, the horizon will bring accountability both in evidence of learning and in cost. Historically, most employers have offered generous financial and time off packages for CE. Yet with the diminution of expenses, including CE benefits, this financial reality may be the pinnacle upon which we are forced to change our behavior and direct us into online learning. We will have to find less expensive means to meet our CE needs. We will turn to online education for a large part of our fulfillment—and we will learn more! We will save our travel/conference time for hands-on/ lab learning. This may be a rare example of decreased financial resources actually bringing increased quality and evidence-based learning. We may be forced to try it—and once we try it, we will love it.

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