

We're going through a major transition; some people would call it an "inflection point." Instructor-led training has been the basic method of instruction since someone first taught something to someone else. Now, a new method of instruction promises to take a significant role in the delivery of learning: e-learning. It's heralded by some people as an invention with greater impact than Gutenberg's printing press; others dismiss it as another hula-hoop, a passing fancy. But most people in our profession believe that both approaches are here to stay. The question is how will they co-exist?

The biblical prophet Isaiah talked of a time when the "lion and the lamb shall lie down together." A wag comments that he doubts the lamb would get a whole lot of sleep. Similarly, some proponents of instructor-led training are wary of new learning technology and the huge sum of money being poured into its development. It appears that some standup trainers aren't getting much sleep.

We the authors represent the perspectives of two people, one with a long history in the instructor-led training world and the other with a career in the new technology-delivered training arena. Those two methodologies can not only co-exist, but can also come together to create something far better.

The advantages of e-learning are well documented and even obvious. Huge cost-savings can result from cutting travel expenses and time away from the job. The efficiency of e-learning comes from

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• A full understanding of the benefits of combining instructor-led and e-learning approaches is likely in time and with further research, but early successes are encouraging.

• A truly blended solution has these characteristics: a completely integrated instructional design, consistent framework and nomenclature, each method delivering its best, maximum flexibility, and variety.



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The e-learning side

the ability of skilled instructional designers to remove all extraneous information and activity from the learning process. It's also well documented that many people learn more efficiently using technology. Some companies have mandated that all training must be delivered over the Web. So far, those companies have been high-tech, with employees who are generally highly computer literate and with internal systems that

enable delivery of robust programs. We believe elearning will grow to become a significant part of the learning landscape and will make significant contributions. Those are just some of the reasons e-learning is here to stay.

You'll find no shortage of predictions about the future of e-learning. The *Wall Street Journal* quotes Merrill Lynch

analysts who estimate that domestic online corporate learning will reach \$11.4 billion by 2003. *Red Herring* magazine forecasts that expenditures for e-learning will reach \$23 billion by 2005. To put those figures in perspective, ASTD estimates that 2000 training budgets were \$3.6 billion for off-theshelf materials, \$7.2 billion for customized materials, and \$34.7 billion for training staff salaries. the If \$23 billion by 2005 estimate is correct and one assumes an overall

spending increase of 5 percent, then e-learning will completely consume expenditures for materials, both custom and off-the-shelf, and one-third of all training staff salaries will focus on developing e-learning solutions. Our belief, however, is that those estimates are too aggressive.

Let's look back a bit. In the early 1800s, a group of workers in England fought against bringing in steam power and other technology, arguing that they were great evils that would destroy jobs and people's dignity. We think a trace of that mentality lingers in our profession. A few people strenuously resist technology, some by harking to our past. For example, a dramatic impact of technology on corporate learning and development was predicted in the

1950s with the advent of programmed instruction and later development of computer-based training. Many training suppliers invested millions of dollars in computer-aided instruction, laser-disc technology, and early multimedia delivery products. Most of that investment was wasted, and few suppliers had profitable businesses in that arena. That history prompts cynics to argue that nothing has changed and that the current craze regarding e-learning will also pass. Other observers are skeptical for a different reason. They argue that nothing can change as fast as the explosive growth predictions for e-learning suggest; the way people learn simply will not undergo such a rapid upheaval. That would be a far more rapid and drastic change than we've ever witnessed and, therefore, they say won't happen. We regard that as playing turtle,

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pulling in your head so you can't see and won't be harmed by the threats around you.

So far, instructor-led training and e-learning have existed side by side. Nearly everyone in the field thinks there'll always be a place for instructor-led development programs. Most observers can see the benefits of Web-delivered or intranet-delivered programs with all of their cost efficiencies. Many practitioners seem content to let the two approaches compete in the marketplace, waiting to see where each finally settles. That's an especially comfortable position for people who believe the pace of change will be slow and dislocations will be gradual. Centuries of experience have shown the power of people coming together to learn. Why? We offer a few speculations:

- The enthusiasm of the facilitator for the content is contagious and encourages learning.
- People prefer to learn in a social situation.

• There's accountability in a classroom that's missing in e-learning.

• Learning occurs casually and indirectly when individuals interact.

• Instructor-led sessions remove people from their daily work responsibilities, so participants can focus on learning. There's no such protection when using e-learning methods.

• The questions and comments of class members help raise and address important issues, and make it comfortable for others to talk.

• The pattern of learning in a group environment is established in almost everyone's school experience

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and connects with our past.

• The facilitator speeds the process of knowledge acquisition.

• Classroom experiences provide opportunities for learners to practice and rehearse skills and to receive feedback from others.

- Similarly, you can derive enormous benefits from e-learning:
- Investments in instructional design result in highly efficient, no-fluff programs.

• The use of varied learning methods results in highly engaging programs.

Powerful allies

• Huge cost savings come from people not needing to leave their work, travel long distances, stay in hotels, rent cars, and eat out.

• People progress at their own pace and don't hold back others or become bored by a slower pace. Learners can repeat parts of a program that aren't clear to them.

• People can complete learning at times that work best for their schedules.

• Many people learn more effectively on their own rather than in groups.

• In some content areas, results comparable to those of instructor-led training have been achieved in 40 to 60 percent less time.

• E-learning seems especially appropriate for transfer of information and cognitive understanding.

• Complex performance skills can also be learned efficiently with technology-enhanced learning such as flight simulators.

A third view, which we hold strongly, is the value of blended solutions. We think it's a mistake to let the disciplines of instructor-led training and e-learning parallel each other when there can be huge gains through integration. A full understanding of the benefits of combining both approaches is likely only over a long period of time and with further research. But early successes in creating blended solutions are encouraging.

One of us was involved with

IBM's blended solution for developing first-level managers. Its success has been well documented in various publications (see "A (Fast) Week in a Digital Collaboration Space," January T+D). The cost-savings in delivery materialized and justified the frontend development costs. In fact, the instructor-led part was used as a reward to ensure that employees would complete the front-end activities.

Other blended solutions are in development and show great promise in providing positive learning outcomes at a significantly lower cost to the company. Still, skepticism abounds regarding e-learning's capability to deliver powerful soft-skill—or as we prefer to call it—performance skills development. In that area, we don't think e-learning by itself will always achieve what's necessary. But that stance will require a great deal of proof to many professionals in our field. And yet, we're surprised by the number of practitioners who don't believe technology has a role in teaching human-performance skills. We need only remind them of two of the most powerful learning systems ever devised: the flight simulator and the driving simulator. They teach extremely complex human-performance skills better than any instructor-led session possibly could.

Simulators have several elements that set them apart from other e-learning experiences:

What constitutes a truly blended solution? These characteristics:

A completely integrated instructional design. A blended solution doesn't occur when you just bolt on some e-learning modules to an instructor-led session. It's only when the pieces fit together logically like finely machined parts of an engine that you create a real blended solution.

Consistent framework and nomenclature. It's easy to spot programs that have been assembled from loose parts. The underlying values or philosophy of the pieces aren't aligned, the language isn't consistent, and the concepts are jarringly different.

Each method delivering its best. E-learning delivers content and handles the learning manage-

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- the built-in extraordinary realism
- the highly interactive nature of the experience
- the opportunity for learners to make safe mistakes and get immediate feedback
- the capability of learners to achieve unconscious competence by repeated practice.

Other simulations make us confident that e-learning has an important role in learning performance skills. In fact, when the learning objective extends beyond absorbing facts to changing behavior or learning new behavior, blended solutions can be ideal. To change how someone acts requires more than imparting knowledge. New patterns of behavior must be created, based on powerful new insights. That's more likely to occur in a blended learning process than in an e-learning experience. ment processes, process assessments, and feedback tools. It also delivers content and robust simulations that must come over the Web. The instructorled sessions are used for content that requires touching people's emotions, for practice and rehearsal, for discussion of the challenges participants will face implementing what they've learned back on-the-job, and for feedback between participants. Maximum flexibility. Learners benefit in situations in which more than one delivery method can successfully accomplish a learning objective; learners can choose which to use. Some people prefer content delivered in a discovery or experiential way; others prefer linear, deductive content. Blended solutions provide options.

Variety. Learning approaches include assessments, online coaching and mentoring, self-paced Web-

Getting there

delivered content, behavior modeling, simulations, full-motion video, and online testing.

Organizations will encounter several challenges in using blended solutions. One, companies tend to have internal competence in either instructor-led training or e-learning but seldom both. Most traditional organizations have training departments with long experience and great capability in delivering instructor-led training. Some high-tech companies have staff who are inclined toward Web delivery on the intranet. We haven't seen many cases in which both capabilities exist in relatively equal portions. Typically, that means a company's employees will be approach predisposed to one or the other, making it hard to develop truly blended solutions.

Another hurdle is the huge front-end investment required for e-learning, despite the fact that delivery is relatively inexpensive. To make the investment, an organization must be convinced of the bene-fit of the blended approach. It could view blended as the worst of all worlds because of the high frontend costs and moderately high delivery costs for the instructorled parts. In addition, with blended learning, the costs are higher for the instructional design and skills required to combine instructor-led learning with technology-delivered learning.

There's always resistance to something new. Blended solutions are unfamiliar territory for many people who are responsible for the learning and development in their firms. Selecting the proper content and tailoring it to the targeted audience will be another challenge. The up-front cost demands a large population of learners—supervisors, middle managers, sales staff, or customer service reps—to justify the investment. At the same time, the content selected for delivery must be widely applicable—basic skills of leadership or management, basic selling skills, fundamental customer service skills—in contrast to highly specialized content related to a small aspect of one job.

We certainly aren't first to observe that in the rush to e-learning, the emphasis has been largely on the *e* and not the *learning*. But learning will ultimately determine which approach will prevail and in what proportion or circumstances. We must stay riveted to our objectives of learning and behavioral change. If those don't happen, all of our programs could be given free to clients and they'd still be the losers. Their people will have wasted time and been de-motivated rather than inspired. They may resist further learning activities. Worse, the organization will experience huge opportunity costs because in the time it spent using ineffective learning procedures, it could

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have used an optimum learning approach to develop a well-trained, highly motivated workforce. Chances are, some of its competitors will have been wiser. **TD**

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