

Back to (the Internet) Class

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(Perspective 2017: This article provides a time capsule look back 18 years at our thinking about online management training options. The newest target audience then were managers and supervisors (pre-millennials) most not tech savvy or comfortable with online training but beginning to rely on email and to participate in video conferencing. The organizational incentive was the high cost of travel in terms of time and money. The article begins ...)

From this training supplier's perspective, only one kind of online training is truly interactive and it has many elements of the a traditional classroom.

Novel vs. Traditional Training

Computer-based training is here to stay. So are innovations in live-broadcast and live-Internet instruction many of which are even more appropriate for some types of training. But excitement about any new technology should be tempered with knowledge of its downsides including the fact that many learners prefer the traditional classroom environment. I've been in training for 30+ years, much of it in front of a group. But I'm one of three owners of a small training company that recently made a big commitment to distance learning using the Internet. This article describes how we came to that decision, highlighting factors other readers might consider if their organizations are looking for similar solutions.

Hard Lessons About Training Alternatives

Supporters of technological innovation can be, overzealous. We learned this the hard way in the 1980s, when a potential corporate partner persuaded us to convert our training to interactive video, the new technology of the day. After we secured subcontractor agreements and completed the storyboard for the new product, our prospective partner backed out; they'd lost all interest in interactive video, they said. We scrapped our plans and cut our budget accordingly. The same thing happened to others – companies purchased the necessary equipment and developed several course titles, then killed the interactive training effort soon after it

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began. Why? The high entry cost of laser disc interactive video, some said. But this doesn't explain why companies abandoned their plans after they paid for equipment and courseware. No, the reason was even simpler - no people. "Field of Dreams" notwithstanding, just because you build it doesn't mean they'll come.

Training managers told us that sitting alone in a learning lab with an online mechanical instructor, even with "interactivity," was just not as attractive as the experts had hoped. Most of their students, they said, preferred the standard classroom workshop's give-and-take with instructors and peers (mostly peers). Given a choice about getting their training from interactive video, people chose not to. Lesson learned?

Training Applications for Recent Technology

A few years ago, some of our prospective customers began to ask about desktop delivery of our critical-thinking courses. We began to explore what the new multimedia technology might offer for delivery of our workshops. It was especially attractive now that the Internet and intranets have spread web-based versions of CBT (computer-based training referred to here after as WBT) from the learning lab to the employee's own desktop.

We found that it is now quicker, easier and cheaper to develop high-quality WBT than ever before but, as you may know, it is still not that quick, easy or cheap. However, the technology has improved to the point where mere mortals can tackle WBT development projects, with the help of authoring software and some technical assistance from multimedia specialists. The good news about the new technology, from our perspective, was not just lower costs, but the possibility of developing the project in-house to maintain control of the development process.

We incorporate three key learning activities into our workshop designs, activities we believe are responsible for making our training effective. Any distance-learning tool we used, we decided, had to match or beat our present levels of effectiveness in all these areas:

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Activities led by the instructor

- clear visuals
- brief presentation
- prepared questions

Activities initiated by participant

- questions and discussions

Activities practiced by the group

- case studies
- collaborative application of ideas to real job issues

One of WBT's strengths is the way it can assess students' basic understanding and help overcome their learning errors. But it addresses primarily the content-delivery piece that would take place in the classroom under the heading of instructor-led activities. It doesn't address student-initiated interaction or student collaboration. Therefore, our product-development strategy was to supplement WBT with class meetings. We realized that some customers might opt to use only the WBT portion of the series, but we hoped not; we believed that interaction with a human instructor and participants was essential to achieving training's goals, namely skill mastery and behavior change.

Get Ready Get Set . . . STOP! . . . Hold It!

For our first self-paced WBT product, we evaluated several different authoring packages, made our selection, attended WBT authoring training, and scheduled the project development time. We estimated it would take six months to develop a complete working prototype (beta version) and an additional two to three months to get the final version on the market.

But a funny thing happened on the way to starting our WBT project: I tripped across live instruction over the Internet. Just weeks before our nine-month clock started ticking, I learned about another distance-learning option offered by several software companies: the so-called "live Internet classroom." This technology allows an instructor and participants to hook up in real time with both an audio connection and a virtual-classroom display on each participant's desktop. The computer display includes a virtual

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whiteboard for showing slides, typing, writing and drawing on the fly, just as an instructor might do in a live classroom setting. Participants may also use the whiteboard to display their work, as when groups report the results of breakout exercises. There are virtual versions of other classroom analogs you can "raise your hand" to ask a question, and even send the instructor a private message. Instructors can get immediate feedback on questions and, if they choose, summarize them instantly for the whole class.

The more I learned about this approach, the more excited I became. Here was a way we could reclaim full classroom interaction instructor to participant, participant to instructor and (some) between participants. We could take advantage of electronic-display technology's rich colors, graphics, capacity for detail, and ease of production. We could capitalize on all the years invested in developing and refining classroom materials and translate standard workshops into a new format simply, directly and rapidly. Plus, from a human resource point of view, the talent and experience of good instructors (ours and our customers') could be fully leveraged.

Saving Time and Travel Costs

Some distance-learning solutions require special studios and broadcast equipment. But those that use existing Internet and intranet connections save a lot in hardware costs. And what costs you do incur may be offset by the gain in productivity, especially for participants but also the instructor's time. For example, our standard classroom version of one workshop, Systematic Project Management, requires one day to teach but the time an instructor must take to travel to and from a remote location often eats up an additional day or more.

In 1999 real-time virtual-classroom software was available from a number of suppliers: Centra Software (Lexington, MA), LearnLink (Troy, NY), Pathlore (Columbus, OH), IBM's Lotus LearningSpace and others.

Features vary among suppliers, so do prices. When we were pricing equipment, the cost of a server often depended on the number of people who could log onto it simultaneously.

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One server can handle 100 or even 1,000s students. Lotus charges a fee for the server software plus a concurrent yearly access license fee for each student.

Teaching and Learning Effectiveness

Of course, just because you can have 100 students logged on at one time doesn't mean an instructor's attention can be split 100 ways. We target our stand-up class size to roughly 20 people, and we're finding that in online learning you want to err on the side of fewer students, not more. When instructors can't look over a classroom and see whether learners are engaged, they must build-in online interaction that elicits a response and it's a lot harder to keep track of responses from 30 people than from 12. So, if an instructor is normally comfortable with 20 students in a "live" classroom, I recommend starting with 15 for the virtual version. But, as always, it depends on the nature of the course. In a lecture class, where the audience is expected to absorb the material by seeing and listening, you could have a much larger student-to-instructor ratio.

Based on my experience and the recommendations of others who conduct online meetings, we decided to segment our online sessions into one- to two-hour blocks - a much more effective time frame for adult learners than a full-day session. Chunking sessions down means that participants learn and retain more per unit of class time than they might in a standard daylong (or many-day-long) class. They are also better able to keep up with their work responsibilities; the sponsoring organization thus avoids disruptions in workflow.

As bandwidth becomes available, everyone will have high-quality audio and video interactions over the Internet. Instructor-led Internet training will be able to fully utilize these capabilities. For example, when each participant talks, his or her video image could be broadcast to the desktop of every other member of the class, without the use of (and headaches associated with) special broadcast studios. In fact, you can do this now. The software is available (but limited bandwidth is common), video quality will vary. But even without hot and cold running bandwidth, an online virtual classroom offers everything the real classroom does: slides and other visuals, instructor's comments, class

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discussions and written materials. These visual and audio elements have been available for several years, using any Internet or intranet connection for the visual connection and a telephone connecting all participants in one big conference call using an audio bridge.

Too Busy for Training? Solutions

One concern I've heard from training departments is that they believe people are too busy to attend standard training events. That's one reason, they say, they are considering the self-paced instruction offered by WBT. But is this a solution that is likely to work for most people? Are busy people going to interrupt their workday and dig into a WBT program? Probably not without some strong incentive help.

Live Sessions

Live instructor-led sessions (face-to-face and internet) may be used to bring people into the learning experience and self-paced instruction could easily supplement the real-time components. People are likely to log on for a real-time online meeting first, because it is a scheduled part of their day, and second, because it offers some personal contact with their peers.

On-site Training works best for Busy People

Offering desktop learning in short time blocks also blurs the psychological separation between "training" and "work." In contrast to going off-site for a workshop, desktop learners stay in an environment whose look and feel is identical to work. Of course, this may mean learners are more subject to interruption, which may require some creative office etiquette while they're "in class" a "Class in Session" sign strung across your cubicle entrance, for instance.

Will They Come?

"What if no one comes?" you ask. That's another positive aspect of this approach to distance learning: You don't have to build a stadium to see if anyone will show up. There is no learning lab, no broadcast studio, no investment in hardware of any kind. If you want to create a trial in-house course, all you need is the software and some time to translate one of your existing workshops into a virtual-classroom format. Or, better yet, find a supplier who offers a workshop fitting one

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of your training needs and have its staff demonstrate how well the virtual classroom works with your people. If they like it, you can buy the software and translate your own training content to fit. This option is a very low-risk alternative.

The social aspect of the live classroom has long been used to change attitudes, motivate mastery, and encourage more effective behavior on the job. While training alone is not usually enough, it is a very positive force for accomplishing these goals. Any technology that mirrors the live classroom's key elements of success is worth pursuing. We believe the virtual classroom will work for us.

Summary (1999)

If you are considering self-paced WBT or real-time (synchronous) online training, feel free to [contact](#) Richard (Rick) Wells, VP of BPI's R&D Department. He would be pleased to speak with you about our experiences and concerns with blended learning using these and other elements. Click on these links for more on [Critical Thinking](#) or [Project Management](#).

Perspective (2017)

Our path started with self-paced WBT training development. Then we switched our focus to the **live internet classroom**. After delivering several webinars as well as full online workshops for some of our customers we came up against a big reality barrier neither we or HRD fully anticipated. **HRD people "caved in"** to management's re-design of our mutually agreed to training format.

The 1-2-hour segmentation feature vanished and was never attempted. Management required that the full class be delivered in one 6-8-hour session, online, with everyone in the target group, easily 20-30 people. This effectively killed the learning effectiveness of this online mode that tests had shown required 1-2 hour segments and small group sizes to be effective. The intensity of online training burnt up participants' attention and pressures to respond to email and other distractions took precedence over learning. Follow up meetings with participants revealed that almost no learning,

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and most missed 50% or more of the classroom time.

What NOW? (2017)

We still think the promise of online learning is valid but incentives must support full participation. For business people the target audience for our concepts is now managers, supervisors, and technical experts. This audience is much more tech savvy than their predecessors. They tend to prefer self-paced options for saving their time and focusing the learning. Therefore, WBT as one element in their learning package makes practical sense.

Accountability. Self-paced WBT looks strong on this goal. It is better at providing accountability with a record of user learning and proof of mastery. If the participant needs to be “certified” in the subject matter, that can provide the necessary motivation to finish the course of study. Strictly speaking, wanting proof of mastery is beyond the realm of training alone. The organization or the participant’s own career goals need to supply this element of motivation.

Examples of some customer “proof of mastery” schemes:

- a. **[Black Belt Problem Solving](#)** (video) requirements for team members. To become a member of a problem-solving work team the candidates complete online course modules plus demonstrate the proper application of the concepts to a number of real problems approved by an expert coach.
- b. **BPI** now offers a **[Troubleshooter-I Certificate](#)** (article) awarded to those who complete the requisite WBT modules and are successful in demonstrating their skills on three current work problems (approved by a **BPI** expert online coach).

Conclusion (2017)

We are actively pursuing partnerships to explore how we can better present our content to millennials. **[Contact](#)** us to discuss ideas! Together we can do this.