

Does Delivery Mode Matter?

How A Seasoned Training Provider Drives Training Excellence through Blended Learning

Bersin & Associates

April, 2004

V 1.1

Research conducted in partnership
with Global Knowledge.



Does Delivery Mode Matter?

One of the biggest questions which training organizations and buyers of training face is the question: does e-learning really work? When buying or building a training program for a given audience, what will be the tradeoffs between the following three options:

Does Delivery mode matter? We studied best practices for a large set of programs in IT and technical training and compared results for:

- Classroom
- Live E-learning
- Web-based Self-study

- Traditional Classroom-based Instructional Training
- Internet-Based Live Instructor Based Training (ie. Live E-Learning)
- Self-Study courseware.

Many organizations still believe that in-class training is the most effective and satisfying to learn new skills and competencies. Yet classroom-based training is the most expensive to deliver and the most expensive way for learners to learn. It requires travel, logistics, and many hours away from the work environment. What is the tradeoff of using e-learning vs. traditional instructor-led training?

This research, developed with data from Global Knowledge on a wide range of IT and technical training programs, proves that when well done, delivery mode does NOT matter.

Global Knowledge

Global Knowledge is one of the industry's largest providers of technical training in a broad range of IT topics. The company operates classrooms throughout the world and delivers thousands of classes per year in a wide range of topics from Microsoft Desktop courses to Oracle administration, programming, Cisco router operations, Voice over IP, Telecommunications fundamentals, Linux and certification programs from Microsoft, Cisco, Oracle, Red Hat and many others.

Like any other training provider, Global Knowledge has invested in e-learning to deliver high value skills and competency-based programs through a variety of media. The company's programs all focus on the technical professional: *the learner must learn these skills in order to do their job or maintain their professional skills. As a result, Global Knowledge's learners have high standards. They pay for the content and it must meet their business needs – effectively and efficiently.*

Global Knowledge's Delivery Modes

Global Knowledge offers high-quality IT training in three delivery modes:

Three Delivery Modes	
Classroom Learning - C	Traditional Instructor-led programs, typically 2-5 days in length. These courses often include lab time in-class.
Virtual Classroom Learning - V	Online web-based instructor-led programs, using Interwise technology - led by seasoned expert instructors. Virtual labs are often used to let students try what they learn.
Self-paced - E	Web based self-study programs. Again, virtual labs are often available.

Figure 1: The 3 Delivery modes

It is important to realize that these three modes are designed to deliver equivalent levels of skills and knowledge. Each modality is carefully designed to deliver an equivalent learning objective, regardless of mode. This means that Global Knowledge takes great effort to make sure that the "live instructor experience" of an "expert teaching an expert" comes through in both V and E modes.

Why use one mode vs. another?

Companies and individuals who take Global Knowledge courses select different modes based on their business needs. If the company is widely distributed and does not have the budget or cultural need to bring people together, they will typically choose a virtual-classroom or self-paced approach. On the other hand, companies who are training workgroup teams which work in a single location or may have an urgent need for an entire team to "learn as a group" will select a classroom approach.

As most training professionals realize, there are many economic benefits to self-study (**E**) or virtual classroom (**V**) modalities. Learners can save time away from their jobs, travel costs are eliminated, and learners can choose to take only the topics they need most. Both V and E materials can be "replayed" at any time, so a learner can go back and re-take or complete materials which they may not have fully understood the first time through.

Study

We evaluated Global Knowledge's training results from 2002 and 2003 in a variety of modes. We examined more than 2,000 classes delivered in each of the three modes and looked at effectiveness from two standpoints:

1. How well did the learner rank the course in terms of total satisfaction? Was the course worth their time and effort?
2. How well did the learner rank the instructor (in the case of Classroom and Virtual)? Did the instructor effectively deliver the material so that the learner could use it?

The courses delivered in these three modes were identical technical topics, so this is one of the first times we have been able to analyze a very large sample of courses, a large sample of instructors, and a large sample of learners – using consistent topics and content across the three modalities.

Live vs. Virtual Classroom

The first set of data is shown below. It indicates that when evaluating virtual classroom vs. in-class training, delivery mode does NOT necessarily matter. As this table shows, when asked about satisfaction with the *course*, students rank the live in-person program as only 7% more satisfactory than the virtual session. Given the convenience, cost, and scheduling benefits of virtual sessions, this tells us that virtual classroom programs, when delivered well, deliver equal or better learning results.

The aggregate answers for this survey were a scale from 1-4, so the results (3.58 for Classroom and 3.34 for Virtual) represent a "B+" overall. The results are highly consistent across learners as well. The standard deviation of the results is less than .2, showing that broadly there is only a slight reduction in satisfaction between virtual classroom and in-class sessions.

When reviewing anecdotal comments, students remark that the virtual classroom experience is effective, convenient, and interesting.

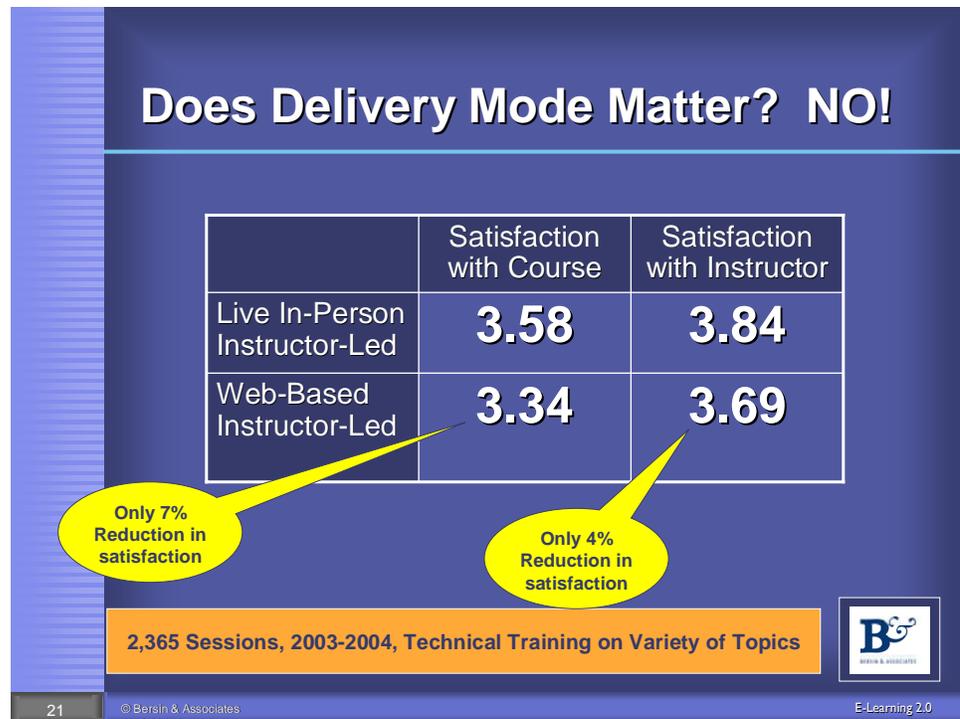


Figure 2: In-Class Training vs. Live E-Learning Results

The second question asked in this survey asks about satisfaction with the instructor themselves. As the table indicates, instructor satisfaction is even higher than course satisfaction overall. And the difference between in-class and virtual classroom in this measure is even lower.

Bottom Line: The most important factor in technical training is the instructor and the material itself, not the media. This data validates the “obvious” but subtle fact that excellent materials, excellent exercises, and an expert instructor will deliver a very high value program through live e-learning... as high in value (or more) than a classroom experience.

Self-Study vs. Live Programs

The second question we asked is “what is the loss of learning results and satisfaction when using self-study vs. instructor led programs?” Self-study programs have many benefits in logistics: learners can learn whenever they have time, they can stop and start at will, and they can learn from home or while on the road. On the other hand, self-study programs in technical topics must be carefully designed because the learner takes on a large burden of learning and interacting alone to master the material.

How does self-study compare to live events? We compared the 2000+ students going through live e-learning with approximately 132 students going through similar technical training on a self-study program. (web-based courseware with interactivities and exercises).

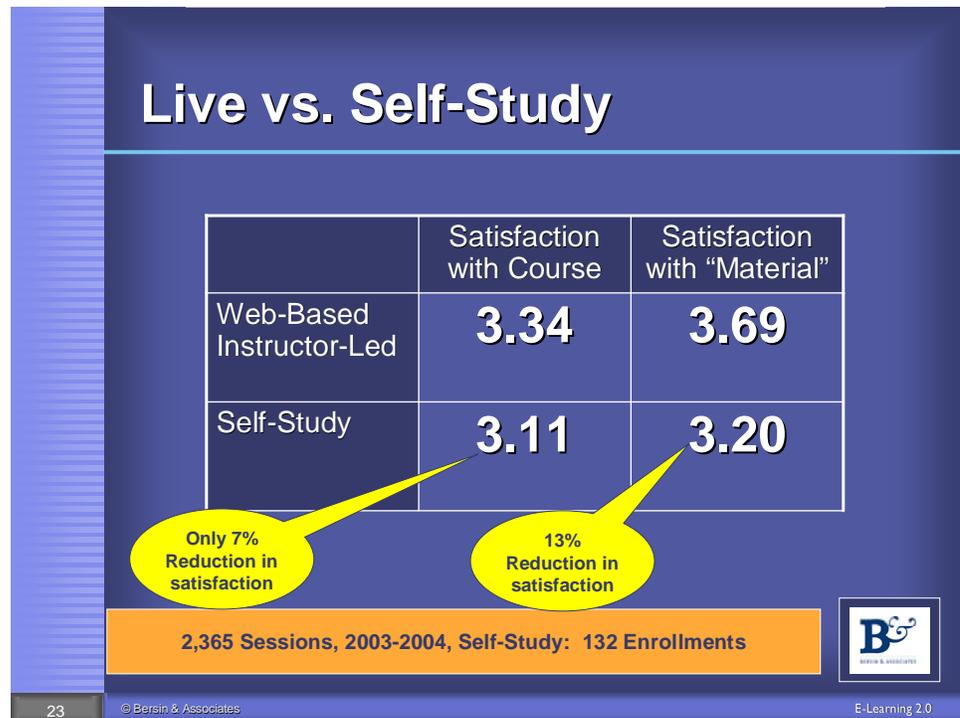


Figure 3: Live vs. Self Study

In the case of self-study, there is no instructor – so the learners were again asked two questions – but this time they were asked about satisfaction with the “material.”

These results are equally exciting. As the figure above shows, again course satisfaction was very close to instructor led. In fact, when asked “would you recommend this course to others?” 98% of the web-based students answered YES. When asked “did this course help you improve your on-the-job performance” again 98% answered YES.

The only dropoff we see is that satisfaction with the “material” is lower for self-study. This clearly indicates the “excellent instructor effect” - an excellent, highly knowledgeable instructor is clearly superior to an “excellent, highly knowledgeable” piece of courseware. We believe that this difference, while significant but not high, can be reduced by embedding instructor-specific voice, animations, exercises, and simulations into web-based courseware. It is usually the “tips” and “experience” of the instructor which drives excellence in instruction. Today much of this can be embedded within web-based courseware through audio and character animation.

What does this mean?

This data proves several things.

In Technical Training, Delivery Mode Does Not Matter

First, remember that the audience we are training and the material in these programs is technical. This is an audience which is not intimidated by computers or the internet.

For such topics, when learners are distributed, the technology will not have a big result on satisfaction.

Instructor and Content Clearly DOES Matter

On the other hand, what this data does show is that the quality of the content itself and the expertise and experience of the instructor DOES matter. In fact, these factors are by far the biggest factors for this audience.

Since this audience is not intimidated or bothered by the use of technology, Global Knowledge has focused its energy on the content and instructor. This focus on high quality, highly interactive experiences has led to these excellent results.

Seamless Technology Does Matter

Global Knowledge has invested in a seamless technology infrastructure which uses Oracle i-Learning and Interwise in a complete and integrated environment. This environment includes self-study reference materials, labs, virtual classroom sessions as well as self-study courses. Together this integrated experience is what enables the instructor to “come through.”

Experience Matters

Global Knowledge has been teaching IT and technical training programs for many years. Their instructors are highly knowledgeable about technology, its applications, and the variety of learning issues and questions which learners face. This experience comes through in live e-learning and self-study. One of the biggest reasons we believe Global Knowledge has achieved such parity across delivery modes is that the company strives for excellence in instructors and material – making sure that this “experience” comes through regardless of mode.

Technical audiences are not intimidated by technology, hence the driving factor is the “instructor.”

Expert instructors drive excellent results regardless of the media.

In self-study content, it is the quality of the material and the ability to embody the “expertise” and “experience” of the instructor that matters.

Conclusion:

This report shows that when designed and delivered by expert instructors, technical training can use any of these three delivery modes to drive excellent results. We believe that this data dispels any myth that “e-learning doesn’t work” or that “e-learning is sub-standard to classroom instruction.”

This is not to say that e-learning is easy. Global Knowledge has invested in the seamless infrastructure, instructional design, and experts to create these high quality programs. Companies who are buying or building such multi-modal or blended programs must make similar investments. The payoff, however, is huge. Through these three different modes, organizations can deliver high quality technical training to wide audiences throughout the world in a highly efficient and effective manner.

About Us

Bersin & Associates is a leading provider of corporate and vendor consulting services in e-learning technology and implementation. With more than 20 years of experience in e-learning, training, and enterprise technology, Bersin & Associates provides a wide range of services including product development, product marketing, industry research, corporate workshops, corporate implementation plans, and sales and marketing programs. Some of Bersin & Associates’ innovations include a complete methodology for LMS selection and application usage, an end-to-end architecture and solution for e-learning analytics, and one of the industry’s largest research studies on blended learning implementations. Our E-learning Research Subscription Service is the only full featured subscription to news, tips, advice, and industry studies available. Bersin & Associates can be reached at www.bersin.com or at (510) 654-8500. For more information on our research subscriptions, please go to <http://www.bersin.com/services> .

Current Research Available

Blended Learning: <i>What Works™</i>	Industry Study & Guide
Blended Learning: <i>Case Studies</i>	Industry Study & Guide
Content Development Tools: <i>What Works™</i>	Industry Study & Guide
Program Management: <i>What Works™</i>	Industry Study & Guide
Application Simulations: <i>What Works™</i>	Selection Guide
LMS Selection Toolkit	Selection Toolkit
Media Selection Toolkit	Selection Toolkit
LMS Implementations: A Market Analysis	Industry Research
Analytics and Measurement: A Market Analysis	Industry Research
Tips and Techniques (library)	Best Practices
Case Studies	Many Available to our research subscribers.
Rapid E-Learning : <i>What Works™</i>	Coming in Q1
Learning Management Systems: <i>What Works™</i>	Coming in Q1
Character Based Simulations	Industry Study
E-Learning in Leadership Training: <i>What Works™</i>	Industry Study

About Global Knowledge

Founded in 1995, Global Knowledge is a worldwide leader in IT education and enterprise training solutions, offering more than 700 courses in 19 countries and in 13 languages. Global Knowledge's Blended Learning Solutions™ combine vendor-authorized and customer proprietary content with Global Knowledge-developed curricula delivered through virtual classroom e-Learning, self-paced e-Learning and traditional hands-on classroom learning. The company offers complete IT education program management solutions, including enrollment, assessment, progress tracking and certification. The company's software products division offers an extensive portfolio of e-Learning performance support and training development tools.