

## Cost Effectiveness of E-learning

*My organization spends hundreds of thousands of dollars each year for classroom training. I've heard that we can cut these costs by half if we offer training via e-learning instead. How is this possible?*

Traditional classroom training can be an expensive proposition for most organizations because of the number and types of costs involved. For example, classroom-training costs typically include the following:

- Facilities (physical space, tables, chairs, temperature control, etc.)
- Catering (coffee, tea, bagels, fruit, etc.)
- Materials (computers, workbooks, pens, tent cards, projectors, game supplies, recognition awards, learning aids, etc.)
- Salaries (instructor and student)
- Lost opportunity costs (lost sales or production because learners aren't working while in class)
- Travel (flights, car rental, lodging, per diem)—up to 40 cents of every dollar spent on classroom training, according to some experts
- Time (for traveling to and from training, spent in training instead of on the job, and spent getting back up-to-speed on returning to work)

Obviously, when it comes to classroom training, the more learners you have, the more it costs to train them. With e-learning, though, the per-person cost of training can be considerably lower.

- **E-learning reduces travel costs.**

Studies have shown that if e-learning is implemented correctly, travel costs can be reduced from 50–80 percent (Hall, 1995; and Hemphill, 1997).

- **E-learning takes less time, which minimizes time away from work.**

Numerous studies, such as those by Fletcher (1990), Adams (1992), Cantwell (1993), Bradley Associates (1994), Hofstetter (1994), Hall (1995), and Hemphill (1997), have found that it takes less time to learn material via e-learning than via classroom training.

Hall's study found the amount of training time was reduced, on average, by 40–60 percent.

Hall's study also reported that the reduction in training time has the most visible impact on return on investment (ROI) because it provides savings in wages and opportunity costs.

Training time can also be reduced through successful completion of preassessments. E-learning preassessments give learners the opportunity to establish competency in course objectives. Learners who pass some or all of the preassessment questions aren't required to take the corresponding sections of material.

Most learning management systems (LMSs)—ours included—automate the administrative processes associated with e-learning. For example, knowledgeWorks (our award-winning LMS) can be set up to allow learners to register for courses themselves. Its reporting and tracking tools are easy to use and will keep you informed about your employees' internal educational status and performance.

- **E-learning can increase training effectiveness.**

The same researchers noted in the preceding bullet have also found that even though e-learning takes less time than classroom training, it does not adversely affect training effectiveness.

None of the studies reported a decrease in training effectiveness. On the contrary, most of them showed a substantial increase in training effectiveness—both in learning retention and in the transfer of training. For example, the Adams (1992) study found the following:

- E-learning produced a 60 percent faster learning curve.
- Learners retained up to 50 percent more information.
- Learners demonstrated 56 percent greater gains in learning.
- Consistency of learning was up to 60 percent better.
- E-learning information was presented 40 percent more consistently.
- E-learning training time was reduced by up to 70 percent.

- **E-learning is cost effective.**

Although the initial development and delivery costs for e-learning can be high, e-learning is still very cost effective. That's because the per-person cost decreases as the number of learners increases. In other words, you pay once to develop and deliver training that will reach more learners in a shorter amount of time, it will take less time to train all learners, and the learners will get more out of it and be able to apply it to their jobs more quickly and easily.

### **An example**

One of techniques.org's clients was considering whether to turn an existing classroom course, taught by a mobile training team, into an e-learning course. But the client wasn't sure whether the switch would be cost effective. Together, we ran some numbers and found that the switch would, indeed, be a wise decision. Here are the facts upon which we based our calculations (the calculations themselves are presented later):

- Approximately 1,500 firefighters were required to complete the course each year.
- The length of the classroom course was two weeks (80 contact hours).
- The estimated cost for each participant to travel to the training site was \$600.
- The per diem for each participant was \$32 a day for 14 days.
- Lodging costs for each participant were \$74 a day for 14 days.
- The cost for instructors was \$59.55 per classroom hour for 80 hours.

- The lost-labor cost for a typical participant was \$18.13 per hour, per person for 40 hours.
- The mobile training team was funded at a cost of \$100,000 a year.
- The course had a shelf life of approximately eight years.

### Annual Savings Calculations:

Travel:	\$600 per trip X 1,500 students	= \$ 900,000
Per Diem	\$32 X 14 days X 1,500 students	= \$ 672,000
Lodging	\$74 X 14 days X 1,500 students	= \$ 1,554,000
Instructor Cost	\$59.55 per hour X 80 hours X 1500 students	= \$ 357,300
Lost Labor	\$725.20 per week X 2 weeks X 1,500 students	= \$ 2,175,600
Travel Team	Annual cost	= \$ 200,000
<b>Total Annual Cost Savings</b>		<b>= \$ 5,858,900</b>

### Savings Over Five Years:

5 years x 5,858,900	= \$ 29,294,500
Less Development Cost =	\$ 700,000
<b>5 Year Net Savings</b>	<b>= \$ 28,594,500</b>

In summary, well-designed e-learning is faster, more effective, and ultimately less expensive than classroom training. Additionally, people who engage in e-learning learn faster, recall what they learned more accurately and for longer periods of time, and are better able to transfer their new knowledge to their jobs.

### References

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