

# DATIA focus

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## E-Learning in the Drug and Alcohol Testing Industry

Numerous studies have shown that workers learn faster with multimedia content; they more accurately recall what they learned over a longer period of time; and they are better able to transfer what they learned to actual performance.

### Introduction

In highly regulated work environments such as the DOT mandated drug and alcohol-testing industry, regulatory mandated training, qualifications and certification present non-trivial challenges to the student, the trainer, and the employer. The costs of compliance are a significant ongoing expense to the business while the cost of non-compliance (such as a PIE) can be insurmountable.

Employers, Third Party Administrators, and Consortiums are accountable for the integrity of the testing process and must be conscientious and diligent regarding the effectiveness of their training programs. Anyone who is performing testing must have current and valid qualifications that meet industry requirements.

This article reviews the potential of online training and structured Learning Management Systems to improve training effectiveness, lower training costs and reduce the business risks of regulatory non-compliance.

### E-learning for our Industry

E-learning, also loosely synonymous with computer-based training, web-based training distance learning and online training, now has two decades of development and practice behind it. While traditional instructor led classes remain the dominant form of education in our industry, professionally designed multimedia web-based instruction is being embraced by students and organizations looking for alternatives to the limitations and ever increasing costs of classroom training.

### The Bottom Line for the Student—Better Retention

- **Flexibility.** Online courses offer greater location flexibility than do courses in classroom settings. Web-based in-

struction that permits students to break course content into manageable segments to suit their schedules and locations offer even more flexibility. Additional convenience comes from travel avoidance for out of town students and online access to course materials.

- **Pace.** Not all students absorb new material at the same rate. Classroom instruction tends to have fairly rigid timelines, which may be too fast for some students and too slow for others. Vocal and dominant students frequently set the classroom pace. Quieter student's learning experience may suffer. Web-based learning also allows students to review and repeat the material at their own pace reducing the risk of boredom and improving comprehension.
- **Fewer Distractions.** In the online environment students retain a considerable degree of anonymity and insulation from distracting factors. Instead, the focus is on the content. Distractions such as breaks, student interruptions, and administrative details are also less likely to permeate an online environment.
- **Convenience.** Most would agree that classroom training is less convenient than E-learning. There are no classrooms to set-up, schedules to co-ordinate, travel and meals to arrange.
- **Student Interest.** Web-based courses are well suited to offering an engaging mix of animation, video, audio, search functions and interactive components such as quizzes. Student interactivity with the course content has been shown to be higher with on-line content as compared with classroom participation. According to the American Society for Trainers and Development, "Numerous studies have shown that workers learn

*faster with multimedia content; they more accurately recall what they learned over a longer period of time; and they are better able to transfer what they learned to actual performance.”<sup>1</sup>*

Taken together the student benefits of E-learning add up to improved student comprehension and retention. “*Studies of major companies comparing technology-based training to classroom instruction show that learning gains were up to 56 percent greater, “consistency of learning” (variance in learning across learners) was 50 to 60 percent better, and “content retention” was 25 to 50 percent higher.*”<sup>2</sup>

## Learning Management Systems

Before looking at the business benefits of E-learning a few words on Learning Management Systems (LMS) are in order. An LMS is a software application for the administration, documentation, tracking, and reporting of training programs. The LMS can be hosted by your training provider or from within your organization. An LMS meets three important needs in regulated environments.

Firstly, the drug and alcohol testing industry is required to keep accurate training records for review by DOT authorities. Secondly, keeping track of training, and monitoring of student progress becomes more problematic with the delivery of distance learning. An LMS allows easier capture and maintenance of records when E-learning participants are geographically dispersed and studying on their own schedules. Finally, an LMS can allow graduates to access their course and reference materials on-line for the life of their certificates. Better LMS systems even permit these materials to be centrally updated as regulations change in order to ensure that all certificate holders have easy access to the latest rules.

A business does not require an LMS to realize the benefits of web-based learning, however training administrators should

be aware of the record keeping challenges involved with E-learning and question their provider on how these needs will be met.

## The Bottom Line for Business—a Better Bottom Line

The business benefits of web-based learning mirror the student benefits but are best thought of in terms of cost reduction, top-line improvement and risk reduction.

- **Cost Savings.** Classroom training is more costly than online training. Expenditures not present with web-based courses frequently include the cost of skilled instructors, travel costs for the students and/or the instructor, the cost of no-shows, printed course materials, scheduling costs, room reservations and preparation, meals as well as the opportunity cost of removing participants from their daily jobs.
- **Speed of Learning.** Time savings can be as valuable as the monetary savings. Various studies estimate that substantially less time is required to cover the same subject online than in a traditional classroom setting. Employees become productive more quickly and off the job for less time.<sup>3</sup>
- **Consistency.** A live instructor may inadvertently omit some material in the classroom due to distractions or time limitations. A well-designed web-based course will always deliver the same material, in the same order and with the same message—an essential element in risk reduction.

## Conclusion

Ultimately, the effort the student puts into their education will determine how much they retain and how beneficial the training will be to their career and employer. Similarly, instructor and course quality, whether web-based or in the classroom, are important factors in student comprehension and retention.

It should be clear that online training is not a second rate alternative to traditional learning in our industry. Online training has earned a place in your training mix.

## Footnotes

<sup>1</sup> Isodynamic.com, “Elearning, A White Paper” [http://www.isodynamic.com/web/pdf/Isodynamic\\_elearning\\_white\\_paper.pdf](http://www.isodynamic.com/web/pdf/Isodynamic_elearning_white_paper.pdf)

<sup>2</sup> Freethinkstudios.com, “It’s All in the Numbers” <http://www.freethinkstudios.com/numbers.html>

<sup>3</sup> Karlkapp.com, “E-Learning Advantages” [www.karlkapp.com/materials/elearningadvantages.pdf](http://www.karlkapp.com/materials/elearningadvantages.pdf)

## Selected Bibliography

Evaluation of Evidence-Based Practices in Online Learning, A Meta-Analysis and Review of Online Learning Studies, US department of Education, Center for learning technology, September 2010. ■

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