

ANSI/ASSE Z490.2 & Online Safety Training Tips

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Who Are We?

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What to Expect Today?

- Active learning
- Discussions
- Questions—Ask 'em!
- Worksheet—for notes and sample exercises
- Follow-ups—blog article, free USB with PPT, worksheet, and guides; see us

What Will You Learn/Do Today?

- Learn about ANSI Z490.2
- Learn if online training is effective
- Learn to implement online safety training at work
- Learn to perform a training needs analysis
- Learn to perform a learning needs analysis
- Learn Morgan's ACCESS acronym
- Get additional resources & invitation to learn more with us

ANSI Z490.1 & ANSI Z490.2

- Z490.1 – Existing standard on EHS training; Criteria for Accepted Practices in Safety Health and Environmental Training
- Z490.2 – Upcoming standard on online EHS training



ANSI Z490.2 Supplements Z4901:

- Z490.1: True of all EHS/safety training
- Z490.2: Supplements Z490.1;
focuses on online

ANSI Z490.2

- In progress
- ETA uncertain
- Maybe in final review in June 2018?

ANSI Z490.2 Covers:

- eLearning courses
- Webinars
- Online videos
- Web pages
- Virtual reality (VR)
- Augmented reality (AR)
- Learning management systems (LMS)

Current Z490.2 Structure:

- Section 1: Scope, Application
- Section 2: Definitions
- Section 3: Management of Training Program
- Section 4: Training Program/Course Development
- Section 5: Training Delivery
- Section 6: Training Evaluation
- Section 7: Documentation & Recordkeeping
- Section 8: Learning Technology Issues

**IS ONLINE TRAINING
EFFECTIVE?**

Is Online Training Effective?

- Short Answer: Yes
- (Slightly) Longer Answer: To Come

Different Training Delivery Methods



Different Instructional Methods

- Practice
- Feedback
- Visuals
- Consequences
- Repetition
- Etc.

Is Online Training Effective?

Department of Education:

"The meta-analysis found that, on average, students in online learning conditions performed modestly better than those receiving face-to-face instruction."

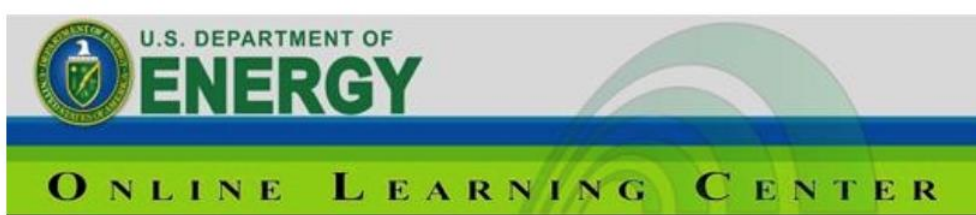
Is Online Training Effective?

Dr. Will Thalheimer:

“In the first section of the report, five meta-analyses were summarized, comparing eLearning and learning technologies in general to traditional and classroom practice.

Overall, these meta-analyses found that **eLearning tends to outperform classroom instruction**, and blended learning (using both online learning and classroom instruction) creates the largest benefits.”

Is Online Training Effective?



Whether you're looking to discover new learning opportunities, better manage your career, request external training or connect your employees with the learning they need, OLC provides new features and services to help.

- Fulfill your training needs with ease and save money on travel and training costs
- Explore the enhanced catalog and complete a course at your own pace to stay abreast in the latest technology, science breakthroughs, and other top key professions.
- Take a few courses at your leisure or schedule several courses at a time to remain marketable in the workforce and sharpen your knowledge, skills and abilities.
- Whether at your desk, the comfort of your home or on the go, access your online training 24 hours a day, 7 days a week! Click the icon to go to that subject area or Click the link to go directly to that topic

Blended Learning Solutions



Blended Learning

ANSI Z490.1:

“Multiple delivery methods may be used in a single training course or event. The training provider should consider a variety of methods, including but not limited to on-the-job training, lecture, computer-based training, discussion, classroom exercises, demonstrations, guided practice, activity-based interactive groups and virtual learning.”

Blended Learning

Department of Education:

"The difference between student outcomes for online and face-to-face classes—measured as the difference between treatment and control means, divided by the pooled standard deviation—**was larger in those studies contrasting conditions that blended elements of online and face-to-face instruction with conditions taught entirely face-to-face.**"

Blended Learning

Dr. Ruth Colvin Clark:

“Evidence from hundreds of media comparison studies shows that learning effectiveness does not depend on the delivery medium, but rather reflects the best use of basic instructional methods...

evidence suggest that blended learning environments are more effective than pure classroom or pure digital learning...

The U.S. Department of Education found a significant learning advantage to courses using media blends compared to pure classroom-based or pure online learning.”

Blended Learning

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Overall, these meta-analyses found that eLearning tends to outperform classroom instruction, **and blended learning (using both online learning and classroom instruction) creates the largest benefits.**”

TAKEAWAYS:

- Training delivery method (online, classroom, etc.) really doesn't matter—all can be effective
- Instructional method used in delivery method (practice, feedback, visuals, chunking, etc.) DOES matter—these are what make training effective
- Blending provides increased training effectiveness and is a best practice

**IMPLEMENTING Z490.2/
ONLINE SAFETY TRAINING**

Best Practices for Implementation

- Make the business case for online EHS training
- Get management support
- Determine safety training needs (training needs and learner analyses)
- Determine best “blend(s)” of online and non-online for safety training
- Get/create delivery system
- Get/create online courses
- Get employee buy-in/support
- Perform small online safety training “beta test” and get feedback
- Revise based on feedback
- Expand program
- Continuously improve the program and offerings

**MAKING THE BUSINESS CASE
& GETTING MANAGEMENT
SUPPORT**

Making the Business Case

- Reduced Costs
 - Travel, transportation, time
- Increased Effectiveness
 - Self-paced, convenient, standardized
- Increased Interactivity
 - Gamification, simulations, more use of visuals
- Measurable
 - Training is an investment in your employees
 - Completion rates, interaction with content, performance assessments

Convincing Management

- Include estimated return on investment
- What are your leading indicators / metrics?
 - Participation rate in online courses
 - Compliance courses vs. professional development courses
 - Course completion rates and assessment goals
 - “90% of employees will achieve a 70% or higher on the end of course quiz for Walking/Working Surfaces”
 - Do your lagging indicators map back to training deficiencies?

TRAINING NEEDS ANALYSIS

Training Needs Analysis

- Identifies performance gap
- Identifies cause of performance gap
- Determines if training is proper solution
- Create learning objectives
- (And then) Create training

Training Needs Analysis – Basic Steps

- Step 1: What's the problem you're trying to solve?
- Step 2: What's causing the problem?
- Step 3: Is training right/best solution?
- Step 4: What knowledge/skills/abilities are necessary?

Training Needs Analysis – Is Online Training Appropriate?

- Can online training create the knowledge, skills, abilities, behavioral change you're looking for?
- Is it appropriate for learning objectives?
- Is it appropriate for assessment needs?
- Is it appropriate for feedback/consequences needs?

Scenario: Perform a Training Needs Analysis

- Use workbook

LEARNER ANALYSIS

Learner Analysis

- Identify learner population
- Identify their learning needs/preferences

Learner Analysis

- Age
- Race
- Gender
- Cultural background
- Education
- Previous work knowledge/experience
- Learning preferences (written, online, classroom)
- Language
- Literacy and computer literacy
- Personal interests
- Motivating factors
- Work schedule

Learner Analysis – Online Training

Considerations

- Employees’ feelings about online training
- Types of online they like/don’t like
- Devices & “infrastructure” availability
- Scheduling issues

Learner Analysis – How to Learn more about Learners

- Talk to/Get to know learners
- Survey learners
- Talk to supervisors
- Talk to HR

Scenario: Perform a Learner Analysis

- Use workbook

SELECTING TRAINING BLENDS

Different Ways to Blend

- (Flipped model) Online introductory "lecture" followed by class for discussion/questions/practice
- Class then online/microlearning for refreshers
- Class then online for in-the-field performance support

Selecting or Creating Online Courses

- “Off the shelf” pre-made courses
- Custom courses
- Customizable courses
- Make your own courses with a 3rd party eLearning authoring tool (for example: Articulate Studio, Adobe Captivate, Camtasia)
- LMS with built-in content authoring tools

ONLINE TRAINING DELIVERY SYSTEMS

Choosing a Delivery System

- Internal company LMS (Sharepoint, Intranet, WordPress)
- External LMS (Network installed or cloud-based)
- External provider with customizable course menu
- Mobile capability

EMPLOYEE BUY-IN

Employee Support for Training

- Consider that Millennials are 20% of the workforce and will be 75% by 2025 (per *Forbes*)
- Personalized and mobile learning
- Include real-world dilemmas or scenarios
- Variety of interactive options to choose from
- Include social learning aspects
- Keep content relevant

**IMPLEMENTATION, ROLL-OUT
& CONTINUOUS
IMPROVEMENT**

Rollout & Continual Improvement

- Perform small online “beta test” and get feedback from employees
- Revise courses and system based on feedback
- Expand program sustainably
- Continuously improve over time

**WRAP-UP & INVITATION
TO KEEP LEARNING WITH US**

Online Safety Training Improves ACCESS:

- **Accountability:** Each employee goes through modules individually and is assessed on their progress individually
- **Communication:** Standardized information is communicated in a variety of ways (text, audio, video, games, etc.) and reinforced through assessment
- **Competence:** The training program can help build competence and help create a learning culture
- **Efficiency:** Employees are able to complete online modules at their own pace
- **Specificity:** Each employee is assigned specific training relevant to their job
- **Security:** Employees can learn in a safe, supportive environment without fear of their incorrect answers being mocked by peers, take their time with difficult concepts, etc.

Learning Organizations/Culture & Safety

- Follow Morgan & Jeff as we learn more about learning organizations in context of safety and “work out loud”
- Read: Peter Senge, Todd Conklin, Arun Pradhan, others
- Your jobs should be about more than compliance training and top-down; empower workers, facilitate knowledge share

Additional Materials

- Online Safety Training Buyer's Guide, Blended Learning Beginner's Guide, Effective Safety Training Guide, Learning Objectives Guide, more
- Blog post with additional related materials, including free webinar:
<http://bit.ly/ASSEPugetSoundOnlineSafetyTraining>

Conclusion

- Thanks for your time
- Hope you found it helpful/learned useful information
- Please contact us anytime
- Please remember to complete & return conference evaluation

Follow-Up Emails

- Give Jeff your card with email address if you'd like to receive a series of follow-up emails on this topic

Thank You!

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