



Instructional Strategies for Effective Safety & Health Training

12:30 pm-1:45 pm



Instructional Strategies for Effective Safety & Health Training

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Quote

“The mind is like a parachute,
it only works if you open it up”.



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Poll Question

How much of your time do you spend in training related activities?

- a. 10%
- b. 15%
- c. 20%
- d. 50%



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Learning Objectives

1. Identify barriers to effective safety training
2. Describe skill sets and methods to enhance training
3. Identify effective instructional methods for training



Learning Objectives

4. Identify tips to improve presentation skills
5. Describe effective methods for evaluating training
6. Identify the secret weapon for training



10 Deadly Sins of Training

1. Appearing unprepared
2. Starting late
3. Not providing sufficient breaks
4. Apologizing for yourself or your organization
5. Cold training room
6. Using inappropriate humor



10 Deadly Sins

7. Not providing coffee
8. Not involving students
9. Not establishing personal rapport
10. Ending late



Why Do You Conduct Training?

- To increasing risk awareness
- Perform job in a safe manner
- Safe operations of equipment or process
- Failure resulted in a loss (accident)
- Meet compliance requirements
- Meet business needs
- Data sources such as medical records and OSHA logs



- Because of technology, globalization and competition, a highly trained workforce is going to be key in gaining a competitive edge.
- This is why safety has to become a performance issue and not solely a compliance issue. ←



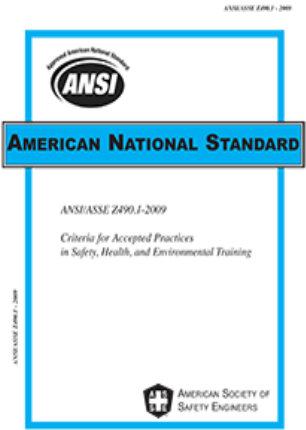
ANSI/ASSE Z490 Training Consensus Standard

- Section 1: Scope, purpose, and application
- Section 2: Definitions
- Section 3: Management of a comprehensive training program
- Section 4: Training program/course development
- Section 5: Training delivery
- Section 6: Training evaluation
- Section 7: Documentation and recordkeeping



ANSI/ASSE Z490.1

- Safety
- Health
- Environmental



Systems Approach to Training



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What are Barriers to Training?



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The Need of The Organization

1. Will the organization be willing to allocate the resources necessary to develop and support an objective based safety training program?
2. Is training really the issue? Or is it another organizational factor issue, such as the culture, or inconsistent enforcement



Needs Assessment Methodology

Instrument	Best Application	Disadvantage
Interviews	Good with small groups Considers participants motivation	May not meet business needs Takes lots of time
Personal observations	Can correct at risk behaviors immediately What's in it for me?	Make sure observers look for the same thing
Procedures & process *log 300 *OSHA Stds.	Business needs Look for trends Use templates	Lagging indicators

How Do You Handle Difficult Participants?



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Difficult Participants

- Saboteur
- Sniper
- Quiet Member
- Anxious Member
- Attention Seeker
- Dominator
- Side tracker
- Polarizer
- Clown





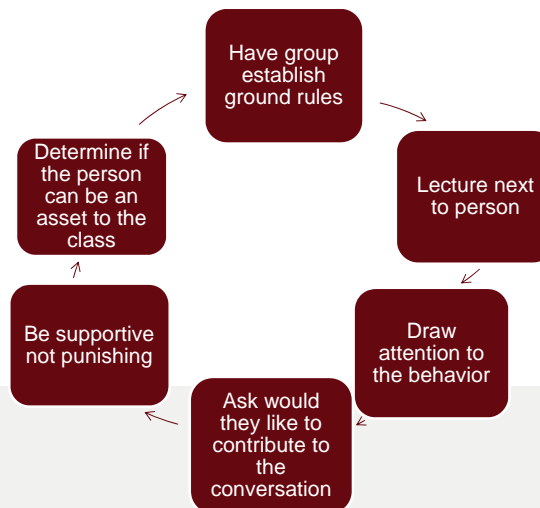
Should not do

- Ignore the person
- Don't get defensive
- Don't smack the person
- Don't express anger
- Don't let the person control the conversation

Should do

- Agree to disagree
- Address the person during break
- Thank the person for bringing up the issue

Options for Difficult Participants



Methods and Strategies for Training



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3 Learning Domains

C _____ (Knowledge)

P _____ (Physical Activity)

A _____ (Attitudes)

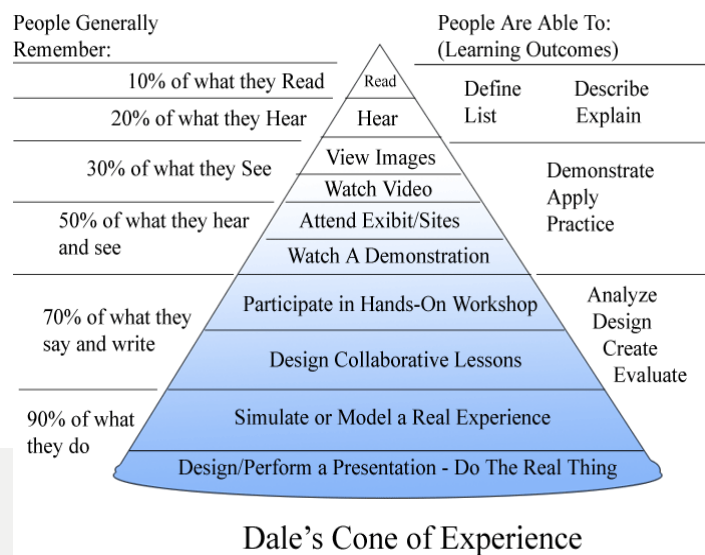


Benjamin Bloom's Taxonomy

How do People Learn?

- Hear
- See
- Do (Application)
- Practice (Develop Skill)

Example: Learning to Ride a Bike



How Do Adults Learn Best?



What are The Characteristics of Adult Learners?





Emphasize:

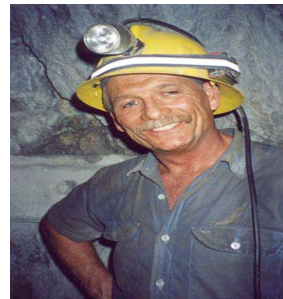
- Hazard identification
- Avoidance
- Control and prevention

Not OSHA Standards



Adult Learner Needs

- Know Why
- Related to Prior Experience
- Must be Motivated
- Oriented toward Problem-Solving



- Self-directed
- The training must correlate to a measurable business need
- Must be reflected in observable behavior that results in the form of training



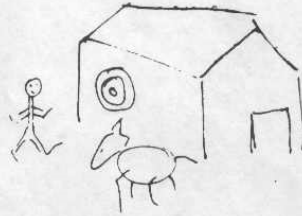
What are Objectives?

- An objective is a (precise) description of (a specific & clearly defined level of) performance you want learners to exhibit before you consider them competent.



Objectives are critical !

TO BE SURE
OF HITTING
THE TARGET,



SHOOT FIRST



AND, WHATEVER YOU HIT,
CALL IT THE TARGET.

Robert F. Mager (in Grizzly's PPT)
Father of the Behavioral Objective

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Which Objective would you prefer Your Doctor Learn & Practice?

A. Practice the removal of an appendix

OR

B. Using the furnished surgical equipment and with assisting operating personnel, each surgical intern will: remove from a patient an inflamed appendix, demonstrate mastery of surgical incision, organ isolation, surgical McKinley technique, removal, antiseptics, surgical closure **and have the patient survive.**



Phases of a Presentation

- Opening
 - Grab attention
 - Minimum of three objectives
- Body (detail)
- Close
 - Summary
 - Emphasize main points



1. Tell Stories

Stories may be the **single most powerful** training “tool.” Why?

- Attention “Grabbers”
- Connect Trainer with Audience
- Enhance Retention
- Vividly Make a Point
- Engage the Mind
- Learn Vicariously

Elaine Cullen



Powerful Delivery Strategies for Trainers

- 1. Tell Stories
- 2. Gain Engagement with Dialogue
- 3. Encourage Reflective Thinking



Delivery Methods

- Mini Lecture
- Structured discussion
- Panel discussion
- Case studies
- Demonstration
- Demonstration and practice
- Simulation
- Skill application
- Role playing
- Games
- Short reading



Tips for Improving Presentation Skills

- Know your subject!
- Prepare
- Prepare outlines and overheads
- Have notes available during presentation
- Ask someone you trust to listen to you and offer constructive criticism



To Be or Not to Be?

What should training **Facilitators Be?**

- Yourself
- Prepared
- Positive
- Flexible
- Mature
- A Guide



(not an Authority)



Trainer Do's and Don'ts

Do

- Be Prepared
- Smile
- Admit if you don't know
- Respect your students
- Use relevant stories to impact learning

Don't

- Try to "Wing it"
- Apologize at the onset
- Be Stiff
- Engage in distracting mannerisms
- Embarrass anyone



Techniques for Classroom Engagement

- Role plays
- Case Studies
- Interviews
- Shared experiences
- Dramatizations
- Demonstrations/Modeling



Audio-Visual Tools

- Videos
- Flip charts
- Overheads
- Slides
- Computers



Slides

Don't Clutter

Simple rule: avoid too many lines

- Six lines per slide
- Six words per line



Use of Color

What results are you seeking?

- Blue: invokes thought
- Red: emotion
- Black: authority
- Purple: humor
- Yellow: worst!



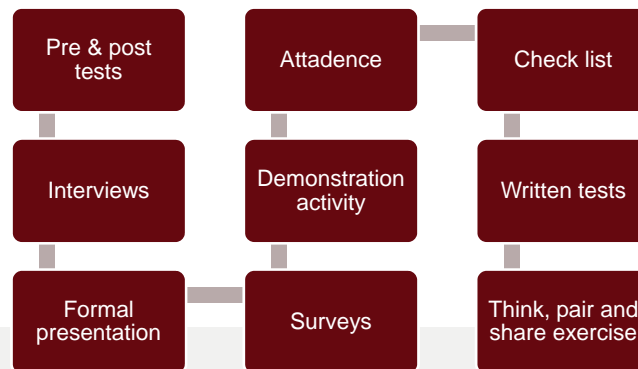
What's the Purpose of Evaluation?



- Determine if objectives were met
- < 30% of organizations incorporate evaluations into the training process
- Has some learning taken place?
- Has the learning improved their ability to do their jobs



Methods of Evaluation



Summary

More importantly, safety professionals should ensure that training presentations have clear and concise learning objectives for the adult learner



Summary

For lasting safety performance the training needs are more beneficial if they are correlated with business needs and measured against established training objectives.



The Secret Weapon?



Use Questions!

- Most effective tool available to trainers
- Make questions Thought-Provoking
- Allow time to think and answer...



QUESTIONS



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References

Bloom, B. S. *Taxonomy of Educational Objectives*, Addison Wesley, 1956

Burke, M. J. et al, Relative Effectiveness of Worker Safety and Health Training Methods, *American Journal of Public Health*, 96(2) 2006.

Gargiulo, T. L., *Once Upon a Time: Using Story Based Activities*, John Wiley & Sons, 2007.

John "Grizzly" Grzywacz. *Training Techniques & Things to Consider When Conducting Training*, Power Point slides, OSHA National Training Institute, Arlington Heights, IL

Mager, R. F. *Analyzing Performance Problems*, 3rd Ed. Center for Effective Performance, 1997

Miller, Kenneth (2005) Objective Basted Safety Training

