



Lunch Box Safety Webinar

Safety Over Sandwiches

**Nov. 6 • Effective Safety
Training Strategies**

Presented by Joe Mlynek, Progressive Safety Services LLC

Today's Webinar

Training Challenges

The Learning Pyramid

Case Studies and Real Life Examples

Leadership Engagement

Delivery – OSHA Requirements

Documentation



The Role of Training

Training Definition: the action of teaching a person a particular skill or type of behavior.

Safety training plays an important role in the prevention of injuries and fatalities.

Training in conjunction with effective written safety, behavioral, hazard analysis programs form the basis for injury prevention.



The Challenges of Delivering Safety Training

Time

Frequency

Keeping employees engaged

Maximizing retention

Bilingual training

Documentation



Focus Question

Think about a safety topic that employees find uninteresting (boring) or you have difficulty delivering?

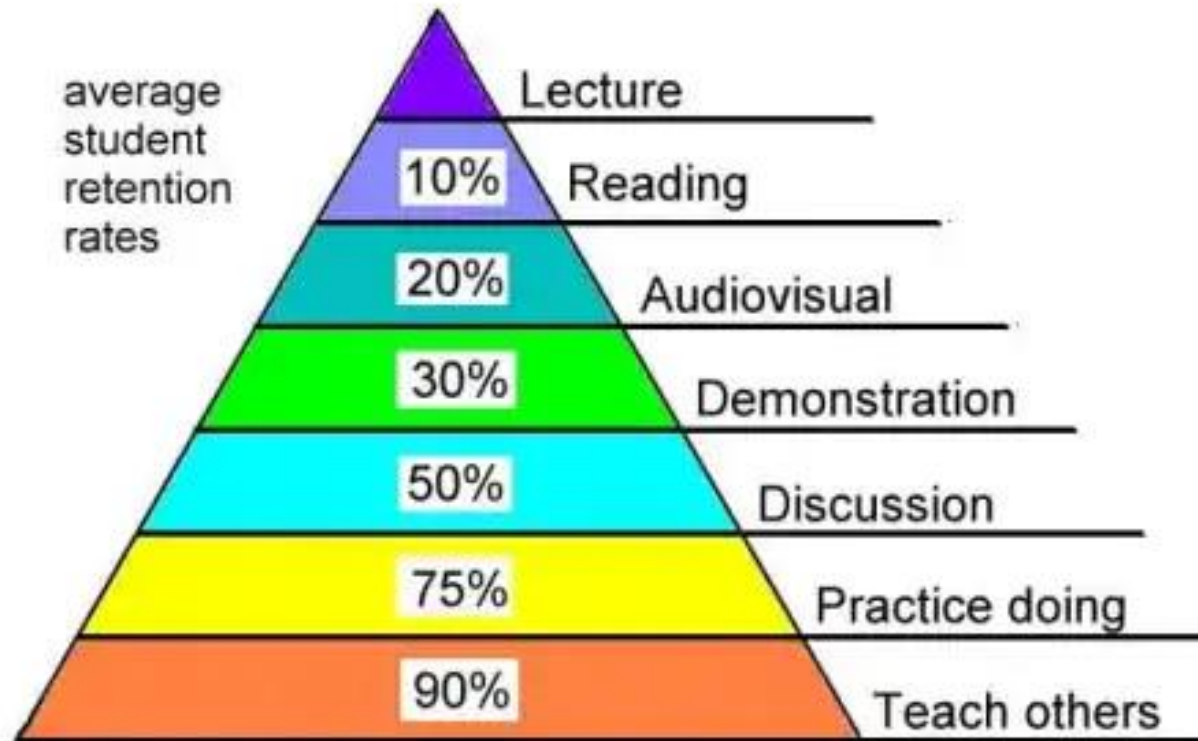
Write the topic down on a piece of paper

For Example – Hazard Communication



**Hazard
Communication
Standard**

Learning Pyramid



Source: National Training Laboratories, Bethel, Maine

Passive Learning

Includes lecture, reading, audio-visual and demonstration.

Passive def. - without active response

Retention Levels:

- Lecture - 5%
- Reading - 10 %
- Audio/Visual – 20%
- Demonstration - 30%



Passive Learning

Most common type of training

Includes use of PowerPoint, video, hands-on demonstration, online, etc.

“Death by PowerPoint”

A combination of all methods provides for greater levels of retention



Passive Learning Challenges

If your audience is still paying attention after the first **8 seconds**, you have approximately 4 minutes and 52 seconds until their attention spans are exhausted.

The average adult attention span has plummeted from 12 minutes a decade ago to just 5 minutes now, according to a Fortune.com article. Jan 7, 2015

Attributed to the increase in distractions in daily life (i.e. checking emails, social media, etc.)



Meet the Challenge

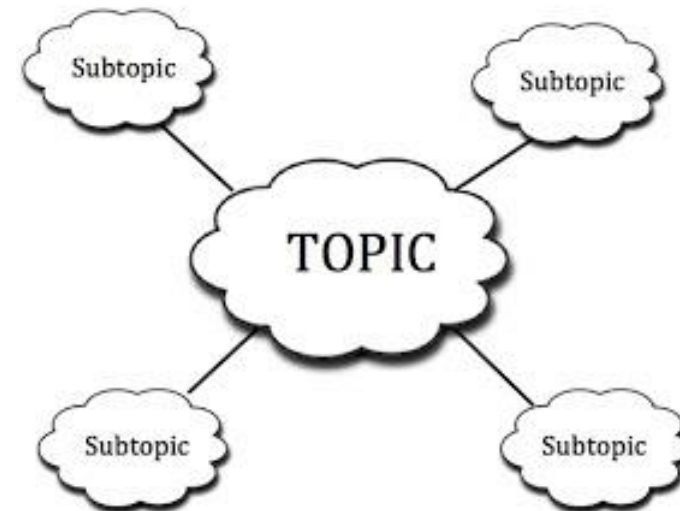
Consider looking at training as a larger period of time that can be broken down into small segments (i.e. 5 minutes)

Training generally 30-60 minutes

Pick a specific subtopic to cover in the five minute period

After each subtopic is covered ask question, pose a short case study, share a story, engage discussion prior to moving on to the next subtopic

Helps learner refocus



Focus Question

What percentage of the training delivered at your organization is passive (classroom)?

25%

50%

75%

100%

Write this down

Participatory Learning

Higher level of retention

Includes group discussion, practice, and teaching others

Average retention levels:

- Group Discussion – 50%
- Practice – 75%
- Teaching Others – 90%



Participatory Learning

Consider:

- Group Discussion
 - Small Group Exercises – Case study, JSA, near miss discussions, incident reviews
- Practice
 - Hands on practice – fall protection equipment inspection, complex lockout/tagout, CSE/bin entry, forklift obstacle course, emergency drills, etc.

**FATALFacts**No. 15 – 2017

Warehouse Fall from Pallet Elevated by Forklift

U.S. Department of LaborOccupational Safety and Health Administrationwww.osha.gov (800) 321-OSHA (6742)

INCIDENT SUMMARY
Incident type:Fall to lower level
Weather conditions/Time of day:Indoors/approx. 6:30 AM
Type of operation:Bulk wholesale warehousing
Size of work crew:22
Worksite inspection conducted:No
Competent safety monitoring on site:No
Safety and health program in effect:No
Training and education for workers:None
Occupation of deceased worker:Laborer
Age/Sex of deceased worker:33/M
Time on job:4 years
Time at task:2-3 hours
Employment classification (FT/PT/Temporary):Full time
Language spoken:Spanish
Union/Non-Union:Non-Union



Photo courtesy of OSHA

Figure 1: Example of a worker unsafely pulling inventory on a raised pallet.

BRIEF INCIDENT DESCRIPTION
A warehouse worker was fatally injured after falling seven feet from a wooden pallet elevated by a forklift. The warehouse inventory was stored on steel storage racks with the highest shelves about

You Have a Voice in the Workplace
The Occupational Safety and Health Act of 1970 affords workers the right to a safe workplace (see OSHA's Worker

Participatory Learning

Teaching Others

- CEO Quote – “If you really want to learn something, teach it”
- Employees assist with instruction
- Employees are often more knowledgeable about processes and equipment
- Include employee’s real-life examples



The Blended Approach

A blended approach of passive and participatory learning improves retention

For example:

- Classroom/online training
- Specific to industry/site hazards
- Hands-On Exercises
- In-class case studies/discussion



Strategies to Consider – Case Studies

Case Study – descriptions of real-life experiences used to emphasize learning objectives, raise awareness, and enhance an employee's understanding and learning experience.

Can be an actual incident or relevant fictitious incident

Require Participants to analyze information and make decisions

Improves decision making skills and group participation (small groups)



Case Studies – Delivery Option 1

Present entire case study to the group followed by group discussion

Allow each group to analyze the incident and report their findings and suggestions to the rest of the group

Focus on challenges involved with case study and how to approach and address them

“How could we have changed the outcome?”



Case Studies – Delivery Option 2

Provide only the events leading to the incident prior to group discussion

Allows group to identify:

- Challenges involved
- The best way to approach each challenge

Discuss the desired outcome prior to presenting the actual outcome



Case Studies - Preparation

Select case studies that are relevant to the group (type of work, industry, etc.)

Consider involving operations employees in developments of case studies.

- Knowledge of negative outcomes associated with performing a task incorrectly (i.e. not isolating equipment openings when performing hot work)



OSHA Fatal Facts

Based on actual fatalities

Find on www.osha.gov

Summarize fatalities in various industries and provide details on the incident including a description of the incident, likely causes, and preventive measures

Include incidents involving mobile equipment, electrocution, engulfment, falls from heights, lockout tagout, etc.

OSHA's FATAL Facts

No. 7 – 2014

Fall from a Telecommunications Tower

U.S. Department of Labor Occupational Safety and Health Administration www.osha.gov (800) 321-OSHA(6742)

INCIDENT SUMMARY

Incident type:	Fall
Weather conditions/Time of day:	Clear, warm, 70°F
Type of operation:	Telecommunications tower construction
Size of work crew:	4
Worksite inspection conducted:	Yes
Competent safety monitoring on site:	Yes
Safety and health program in effect:	Yes
Training and education for workers:	Inadequate
Occupation of deceased worker:	Tower climber
Age/Sex of deceased worker:	55/M
Time on job:	Over 10 years
Time at task:	3 days
Time employed/classification (FT/PT/Temporary):	Not Available
Language spoken:	Not Available
Union/Non-Union:	Not Available

Body Harness
Connector Carabiner
Carrier Rail
Safety Sleeve

Figure 1: Components (parts) of a ladder safety device. *Illustrates correct navel D-ring to safe sleeve connection for this specific device.*

BRIEF DESCRIPTION OF INCIDENT

A worker was climbing down a 400-foot vertical telecommunications tower when he lost his footing. The *ladder safety device* or *system* (consisting of the carabiner, carrier rail, safety sleeve and body harness) he used failed to arrest his fall. The safety sleeve did not activate correctly to stop the worker's fall, the chest D-ring ripped out of the body harness, and he plunged 90 feet to his death.

Likely Causes of Incident

- The worker did not receive proper training on the ladder safety device he used.
- The pawl of the sleeve was defective. The defect prevented the device from activating properly to stop a fall within 2 feet (.61 meter) of its occurrence (29 CFR 1926.1053(a)(22)(iii)). This was identified in a safety notice issued after the incident and as a result of OSHA's investigation.
- The weight of the worker, his tools and equipment was more than the 300-pound rating of the body harness.
- The safety sleeve was connected to the harness at the chest D-ring instead of to the navel D-ring as specified by the manufacturer of the ladder safety device.
- The body harness was not a component of the manufacturer's ladder safety device.

You Have a Voice in the Workplace

The *Occupational Safety and Health Act of 1970* affords workers the right to a safe workplace (see OSHA's *Worker Rights* page, www.osha.gov/workers.html). Workers also have the right to file a complaint with OSHA if they believe that there are other violations of OSHA standards or serious workplace hazards.

How OSHA Can Help

For questions or to get information or advice, to report an emergency, report a fatality or catastrophe, or to file a confidential complaint, contact your nearest OSHA office, visit www.osha.gov or call our toll-free number at 1-800-321-OSHA (6742). TTY 1-877-889-5627. It's confidential.

More Information

OSHA standards and regulations: www.osha.gov/plaws-regs.html

OSHA publications: www.osha.gov/publications

OSHA-approved state plans: www.osha.gov/dscsp.html

OSHA's Free On-site Consultation services: www.osha.gov/consultation

Training resources: www.osha.gov/etv

Compliance Assistance services: www.osha.gov/complianceassistance

Stories have Value

Grain Journal Article – Safety Edition
“Everyone has a Story to Tell”

Personal or real-life experiences from
employees at all levels

The more you share, the more others will
share

Allow employees to relate to subject matter

Create internal images that employees will
retain from time to time



Leadership Engagement

Engagement – “to participate and become involved in”

Don't just attend, actively participate

Ask pertinent questions

Re-enforce safe behaviors that will lead to positive outcomes

Ask for feedback, listen to concerns, address concerns and follow up



Focus Question

What can be done at my organization to improve employee retention of information and improve engagement?

Move toward blend of passive and participatory learning

Incorporate case studies and table-top small group exercises

Include time for hands-on practice

Involve employees to assist with instructions

Training Delivery and Documentation

“THE DEVIL IS IN THE DETAILS”

Focus Question

What percentage of the adult U.S. population can't read?

- a) 5%
- b) 10%
- c) 14%
- d) 18%

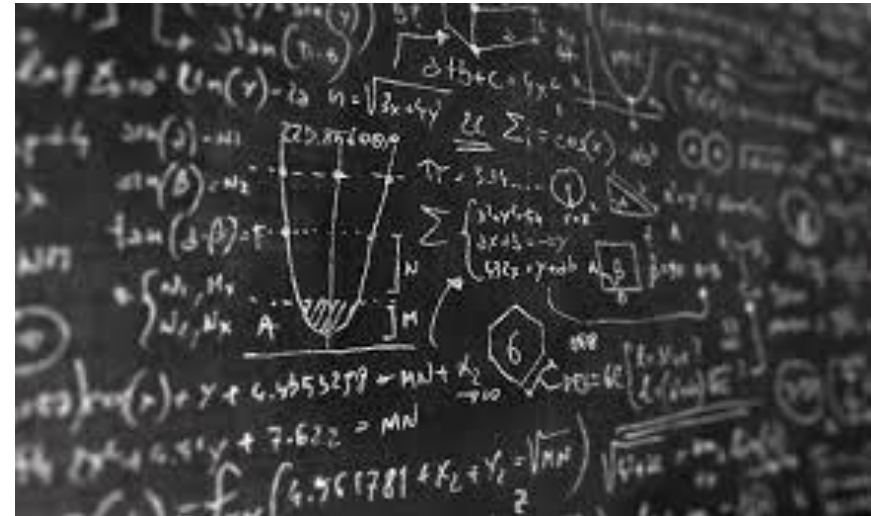
Answer: According to a study conducted by the U.S. Department of Education and the National Institute of Literacy, 32 million adults in the U.S. can't read. That's 14 percent of the population.

Training Delivery

OSHA Training Standards Policy Statement, 2010.

OSHA – “Employee training must be presented in a manner that employees can easily understand. This position applies to all of the agency’s agriculture, construction, general industry, and maritime training requirements”

Consider age, education level, literacy, language etc.



Training Delivery

OSHA “An employer must instruct its employees using both a language the employee can understand, similarly if the employee’s vocabulary is limited the training content must account for the limitation.”

OSHA “If the employees are not literate, asking them to read materials will not satisfy the employer’s training obligation.”

According to a study conducted in late April of 2017 by the U.S. Department of Education and the National Institute of Literacy, 32 million adults in the U.S. can't read. That's 14 percent of the population.



Training Delivery

OSHA “Compliance Officers are responsible for checking and verifying that employers have provided training to employees. In addition, CSHOs must check and verify that training was provided in a format that the workers being trained could understand.”



Bi-Lingual Employee Training

Interpreter

Local high school/university/college– assist with translation

OSHA materials in Spanish (www.osha.gov)

Online training (Spanish)



Training Documentation

OSHA standards are inconsistent with requirements for documentation

Recommend documenting all safety training

"If it isn't documented, it didn't happen."

[illegible]

Training Documentation

Name of Employee Trained (with signature)

Trainer Name (with signature)

Location of Training

Date(s) of Training

Subject / Outline

Proof of Competency – evaluation, testing, etc.

Summary of Content

References to materials uses (videos, PowerPoint, handouts, etc.)



Documentation Retention

How should training records be kept:

- Recommendation: Length of employment plus 1-3 years



In Review

Break larger topic into subtopics

If using passive strategies consider case studies, group exercises, stories, etc.

A blend of passive and participatory learning is preferred

Leaders should take an active role in training sessions

Implement effective documentation





Questions?

Joe Mlynek CSP, OHST

joe@safetymadesimple.com

joe.mlynek@progressivesafety.us

Please connect with me on LinkedIn

www.safetymadesimple.com

www.progressivesafety.us

