

Technology, Audience, Purposes

- Web-CT, Adobe Electronic Textbook
- Designed for the Technician, Professional, Administrative and Regulatory Agency Site Workers
 - Consistent, Assessable, Convenient Training in the spirit of *Learning Anytime Any Place*

Hazwoper-on-the-Web

- 24 Hours of web based training.
- 16 hours of classroom/hands-on training
 Based on CCCHST's traditional 40 hour course.
- Over 100 students currently registered
- Students range from masters degree engineering students, to community college students, to community job training partners.

Training Standards

- AccuracyClarity
 - Logical
 Contextual
- On Task Delivery
 - No distractions
 - Technology that works

- Engagement
 - Multi sensual
 - Responsive to questions
 - Interaction with others

Variety

Multi-media

Lesson 1 - Regulations Overview Lesson Plan 1 **CFR** Exercise **OSHA** and **EPA** Standards Exercise Hazard Violation Exercise Lesson 1 **Lesson 2 - Site Characterization** Lesson Plan 2 Area Delineation Exercise Lesson 2 **Lesson 3 - Hazard Recognition** Lesson Plan 3 Hazard Assessment Exercise Lesson 3 Lesson 4 - Toxicology Lesson Plan 4 Dose/Response Exercise **Toxicology Exercise** Lesson 4 **Lesson 5 - Chemical Awareness** Lesson Plan 5 MSDS Exercise Physical and Health Hazards Exercise **Chemical Worksheet Exercise** Lesson 5 **Lesson 6 - Respiratory Protection** Lesson Plan 6 **Respiratory Protection Exercise** *Lesson* 6

Lesson 7 - Personal Protective Equipment (**PPE**) Lesson Plan 7 **PPE** Exercise Lesson 7 **Lesson 8 - Decontamination** Lesson Plan 8 **Decontamination Procedures Exercise** Lesson 8 Lesson 9 - Medical Surveillance Lesson Plan 9 Medical Surveillance Exercise Lesson 9 Lesson 10 - Air Monitoring & Personal Sampling Lesson Plan 10 Benzene Colorimetric Tube Exercise Lesson 10 Lesson 11 - Radiological Hazards Lesson Plan 11 **Radiation Exercise** Lesson 11 Lesson 12 - Material Sampling Lesson Plan 12 Sampling Plan Exercise Lesson 12

Lesson 13 - Emergency Procedures Lesson Plan 13 **Emergency Procedures Exercise** Lesson 13 Lesson 14 - Safe Work Practices Lesson Plan 14 **Emergency Response Guidebook** Exercise Lesson 14 Lesson 15 - Confined Space Lesson Plan 15 **Confined Space Exercise** Lesson 15 **Lesson 16 - Excavation** Lesson Plan 16 **Excavation Exercise** Lesson 16 **Final Exam**

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What is a hazard? What are risks? What makes certain situations hazardous or certain conditions hazardous? Can we determine the insks involved with doing a particular activity or performing a particular work path? Lesson 3 will take you through the process of identifying and learning how to recognize hazardous conditions and hazardous situations and how to recognize hazardous conditions and hazardous citient to hesen hazardous of the speaker once to start audio; click once to stop audio. Please allow time for audio; click once Text Version Through a better understanding of the various methods used in hazard recognition, workers will see the need to implement the appropriate engineering controls, work practices, or personal		Knowledge Objectives	Knowledge Objectives Automican to protect definition.	Knowledge Objectives Audio	Knowledge Objectives Audio avascript:openText(/haz40/audio/text/lesson3_at.htm)
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Audio

- Needed for Multi sensual Engagement of Students
- Needs (helps) to be <u>Professional Audio</u>

Hands-On

- Needed More
- Needed Modeling
- Needed Guidance

Technology

- Inconsistent
- New Standards
 - SCORUM
 - AICC,
 - IMS and
 - IEEE
- Can Overwhelm You and Your Students

SCORMTM

SCORM (Sharable Content Object Reference Model)

- A reference model that defines a Web-based learning "content model"
- A set of interrelated technical specifications designed to meet the Department of Defense's high level "-ilities"
- A process to knit together disparate groups and interests
- A bridge from general emerging technologies to commercial implementations
- An evolving document to collect all the "bits and pieces" in one place

SCORMTM

Currently, SCORM consists of three main sections: an Extensible Markup Language (XML)based specification for representing course structures (so courses can be moved from one server/LMS to another); a set of specifications relating to the run-time environment, including an API, content-to-LMS data model, and a content launch specification; and a specification for creating meta-data records for courses, content, and raw media elements.

Learning Curve

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- This has not been easy!!
- Web CT and Blackboard are still the best student interfaces for the \$,
- but the trainer/ developer interface is difficult.

The developer must know HTML somputer language.

The developer must have access to a Web designer that knows Java and frames.

The developer must learn the basics. (Send through a 40hr)



Orientation class/program Time lines/goals for completion needed More Hands-On needed Use in traditional classes Use in Train-the-Trainer (pre & post) Just in time corrections and change Need to get continual instructor review

Conceptions

- Can't do it overnight!
 - Staff is not ready
 - Student are not prepared
 - Development takes time
- Need to do it overnight!!
 - Staff needs something to shoot at
 - Students need something to try
 - Developers need a platform to experiment with

Conceptions

- This is not what most think it is:
 - High student to instructor time requirements.
 - Hands-on and critical thinking skill exercises take-up close to 60% of participants time.
 - Student covers more of class materials then in some traditional classes.

Final Thoughts

Distance learning techniques are a mechanism for delivery of information.

Distance learning seldom improves the quality of the delivered presentation.

BUT it sure can mess it up.

Start with a quality product if you want to deliver a quality product and don't let the delivery mess it up.